Version: 2011-10-05

RAS-Manager and RAS-Control

Supplementary installation and operation instructions to the CS121 series adapter manual

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1 General information about the RAS Manager

Figure 1 RAS-Manager

The RAS-Manager relays alarm signals coming from monitoring devices such as UPS, SiteManagers, contact alarms and the like to monitoring stations or email receivers. Any computer with RAS capabilities (Windows, Linux) can be used as a monitoring station. The only requirement is the setup of an PPP-Server on the monitoring station. After the establishment of communications between the RAS-Manager and the monitoring station, a RCCMD signal is sent that depending on configuration can either make log entries, send emails and SMSs or execute programs.
Further a remote user can initiate a PPP-RAS connection from the monitoring station to the RAS-Manager. Since the RAS connection functions like a local network, all of the common tools are available for usage (UPSMON, Internet Explorer, Telnet, FTP). This makes a remote configuration of the RAS-Manager possible. As an alternative to this so called server mode, the RAS-Manager can also operate in Callback mode. This option is of considerable importance for customers with special security measures. In this mode, all incoming calls are not accepted, but the incoming call does signal the RAS-Manager to act as a PPP-client and causes the RAS-Manager establish a connection to the preconfigured number in the PPP-client settings. After the establishment of communications, the operater of the monitoring station can select to start either UPSMON, IE, or Telnet in order to continue working with the RAS-Manager. For this purpose, a conventient tool, RAS-Control, is available for Windows monitoring stations. This tool consists of an easy to use phone book, a configuration page containing connection information: connection description, UPS type, callback, etc. and the possiblility to relay alarms via email or SMS.
Being a CS121 adapter, most of the RAS-Manager functions are described in the CS121 user manual. The additional functions will be described in this supplement to the user manual.

2 Installation and configuration

This section covers the installation and configuration of the RAS Manager and RAS Control program group. Also the setup of the Windows RAS-Services will be covered.

Figure 2 RAS Manager configuration page

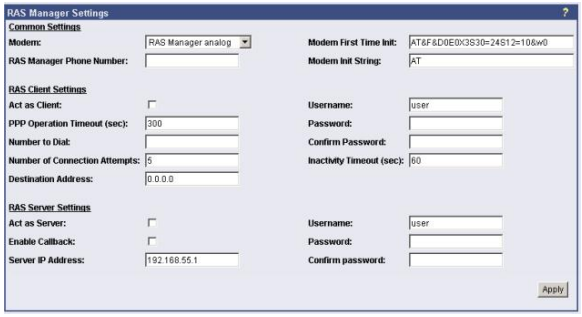


Figure 3 RAS Control Program group

2.1 RASMANAGER / CS121PPP configuration for Internet dial up

Make sure that COM2 is set for RAS.

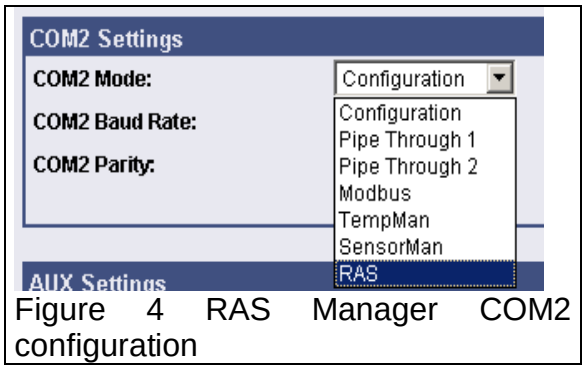
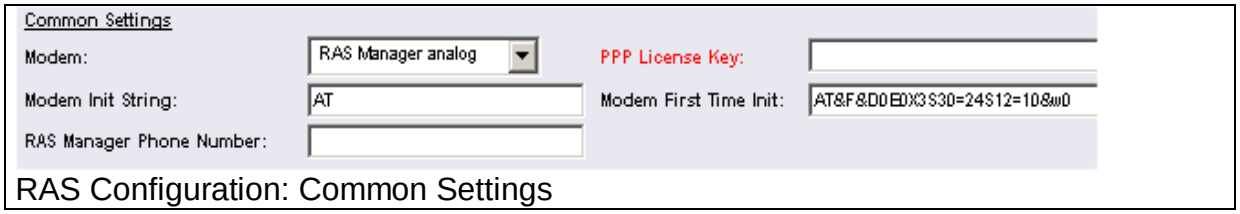


Figure 4 RAS Manager COM2 configuration

The RAS Configuration http-page consists of three parts: “Common Settings”, “RAS Client Settings” and the “RAS Server Settings”. See Figure 2 RAS Manager configuration page.

2.1.1 Common Settings



RAS Configuration: Common Settings

In this section the license which came with the RAS Manager or with the seperate purchase of the RAS Control software is entered. Both the „Modem Init String“ and the „Modem First Time Init“ entries are automatically filled in with the correct entries corresponding to the selection made in the „Modem“ Drop down menu. The RAS

Manager Phone Number is just a place to store the telephone number of the RAS Manager.

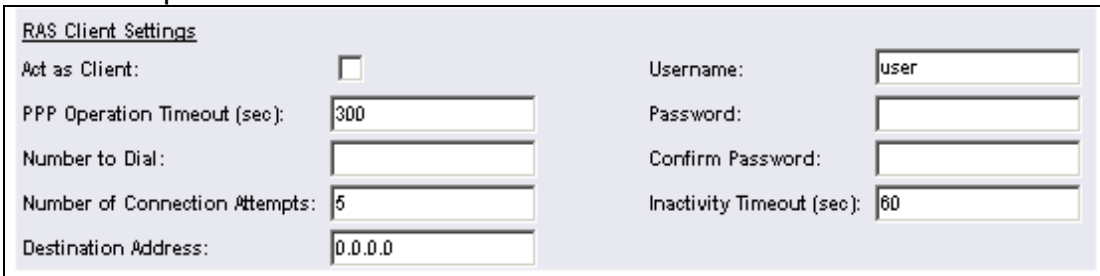
2.1.2 RAS Client Settings

Inorder to send emails directly into the internet, the IP address of the SMTP-Servers must be entered into the email configuration settings. The IP address can be determined using a computer that is connected to the internet by pinging the mail server of the mail server. For example: „Ping smtp.1und1.com“ will result in the IP address of the 1&1 - SMTP-Server.

Here are a few commonly used SMTP- servers:

1und1	212.227.15.161
t-online	194.25.134.97
web.de	217.72.192.157

The Destination Address is entered into the CS121-PPP-Client settings, that way when emails are to be sent a dial-up connection will be made using the Modem/ ISDN-Adapter.



RAS Configuration: RAS Client Settings

Exampl: Arcor

The Modem-Init-Strings depend on the modem and are therefore not part of these examples.

The next step involves entering the telephone number, username and password that are to be used for the connection. The following table provides example entries:

Provider	Telephone number	User name	Password
Arcor	0192077	Arcor	Internet
Freenet	01929	Freenet	Freenet
T-Online	0191011	User specific	

The next step involves setting up the email client. This requires using an existing email account with user name and password.

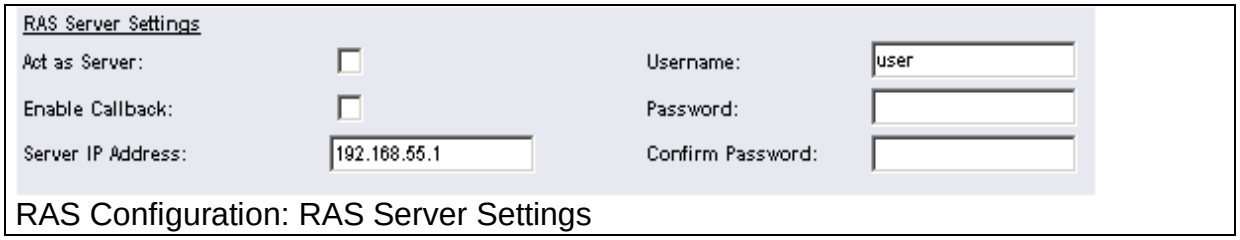
The following account can be use for testing purposes:

Account: generex@web.de
user: generex
Pass word: cs121snmp
IP-Address: 217.72.192.157

It is important that the Server-Address is correct and this IP must also correspond to the address used in the PPP-Client-Settings. After completion of all entries for PPP and E-Mail the RAS Manager must enact a save and reboot.

After restarting, the „Test E-Mail Settings“ function, can be used to test the functioning of the dial up connection.

2.1.3 RAS Server Settings



RAS Configuration: RAS Server Settings

The first check box determines whether the RAS Manager will accept or even register incoming calls. If only the „Act as Server“ box is checked, then the RAS Manager will answer incoming calls and make its services available to the caller if the caller is also in possesion of „Server IP Address“, „Username“, and „Password“.

If the second „Enable Callback“ box is also checked, the RAS Manager will not answer incoming calls. Instead, the RAS Manager will register the incoming call as a signal to enact a Dial-up connection to the computer specified in the „RAS Client Settings“.

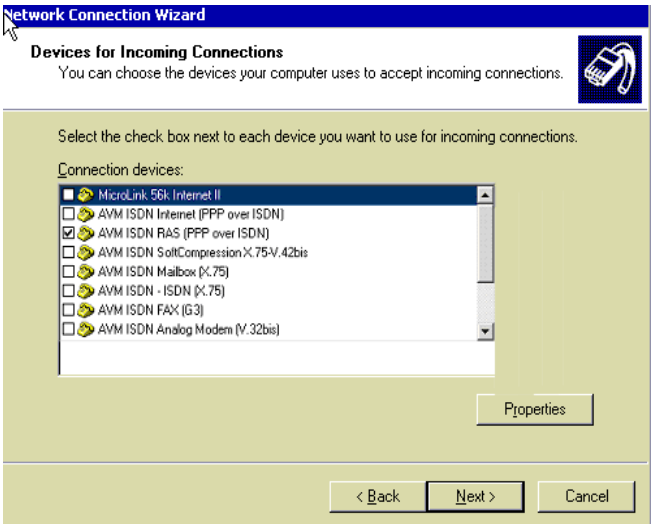
2.2 RAS-Server Configuration using Windows2000/ XP and 2003

In general it should be noted that the setting up of connections for “dial up”, “incoming” calls and RASPhone book entries differ depending on which version of Windows and which service pack is being used. In addition to the following explanations, in the appendix of this supplement three picture sequences are included as examples of what a typical setup under windows might look like.

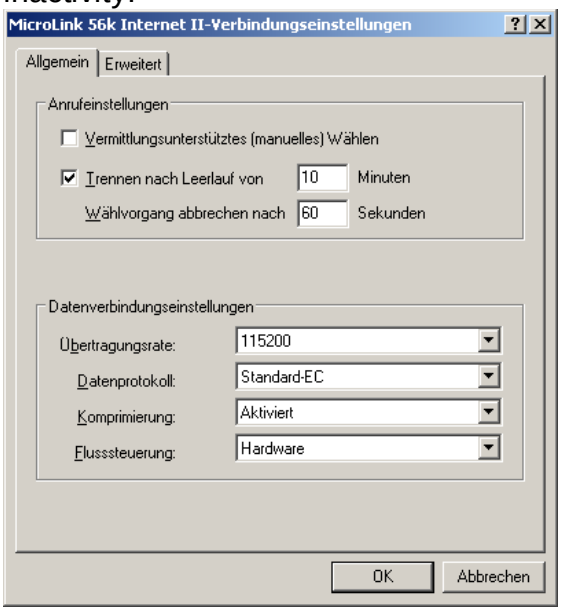
Configuring and starting the RAS-Server

In the Network and Dial-up connections section of the windows control panel, starting (double clicking) the Make new connection icon will start the the windows network connection wizard. Clicking the “Accept incoming connections” stereo button followed by Next begins the setup of the RAS-Services. The assistant then provides the user with a selection of available devices for which one of the options containing “RAS” should be selected in the following the „AVM ISDN RAS“ is selected.

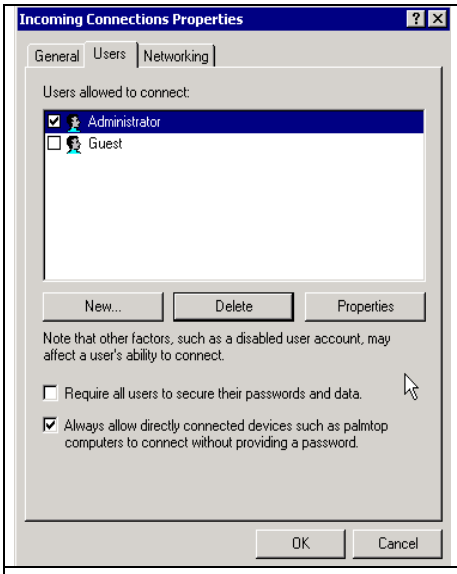
Other configuration settings can be made like setting a 10 minute limit for inactivity.

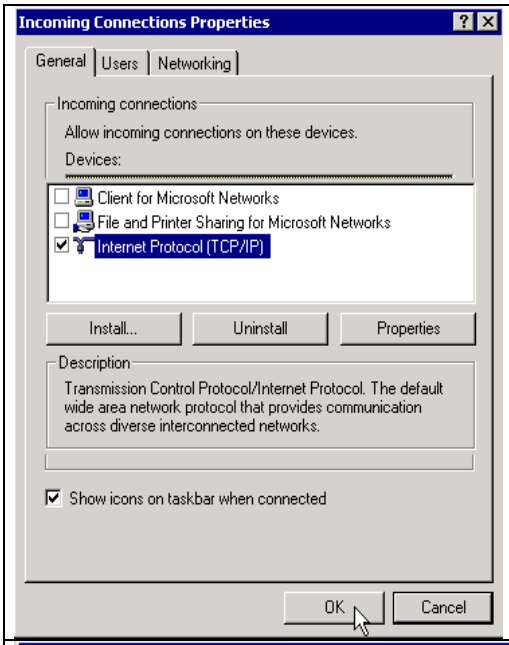
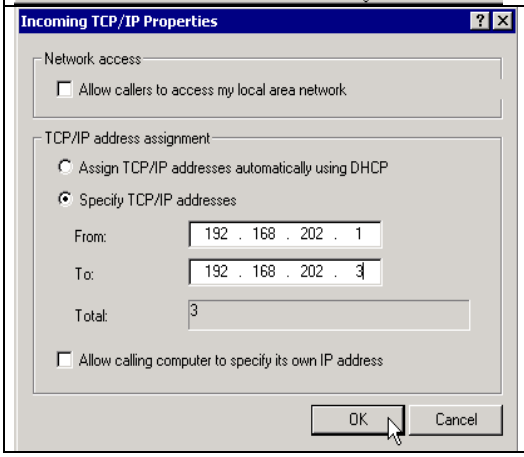

Network Connection Wizard
Devices for Incoming Connections
You can choose the devices your computer uses to accept incoming connections.
Select the check box next to each device you want to use for incoming connections.
Connection devices:
MicroLink 56k Internet II
AVM ISDN Internet (PPP over ISDN)
AVM ISDN RAS (PPP over ISDN)
AVM ISDN SoftCompression X.75-V.42bis
AVM ISDN Mailbox (X.75)
AVM ISDN - ISDN (X.75)
AVM ISDN FAX (G3)
AVM ISDN Analog Modem (V.32bis)
Properties
< Back
Next >
Cancel

Windows Connection Assistant: Devices for Incoming Connections



Connection properties

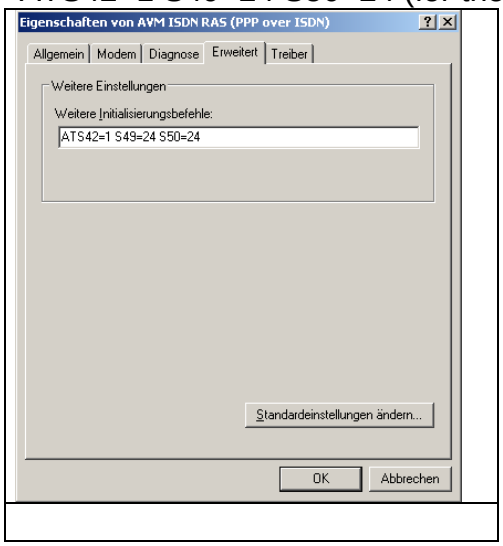
	In the Users tab of the incoming connection properties, there must be a RAS user entry corresponding to the entry in the RAS client settings. The New… button can be used to add this profile.

	In the properties window make sure that only TCP/IP is enabled.
	Make sure that the “Allow callers to access my local area network” box is not checked. Static IP addresses must be assigned in the same fashion as the picture to the left. Finally, the type of password encryption must be specified as PAP. The BatchFile „Papconf.bat“ which is part of the PPP-Dialer License package handles this process.

2.2.1 ISDN Access

If the monitoring station is equipped the an ISDN modem it must also be specified by which incoming MSN calls should be answered. This is either the Telekom MSN

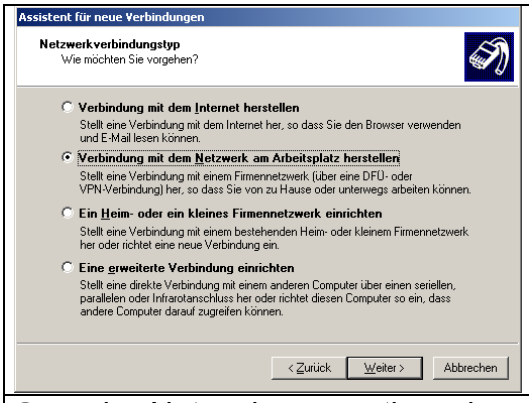
(Telephone number without area code) or the extension code of the telephone. These settings are made in the “Phone and Modem options” section of the control panel. On the modem tab select Man CAPI-Port „AVM ISDN RAS“ and select advanced options for incoming and outgoing calls. This is done using the entries: S49=<Number> and S50=<Number>. The entry will look similar to the following: ATS42=1 S49=24 S50=24 (for the extension 24).

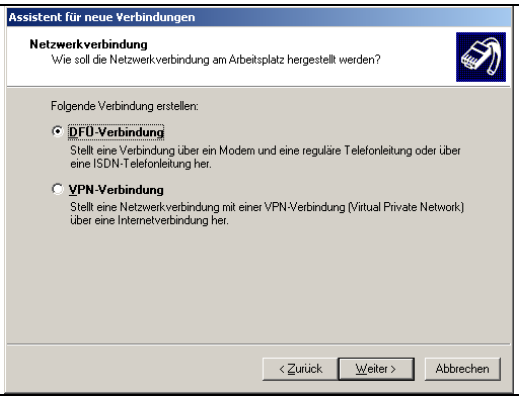


2.2.2 Analog access

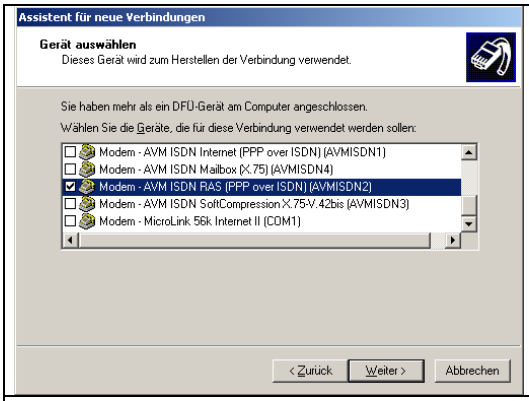
Analoge Modems (ELSA Microlink 56k PCI) require no assignment because this is done by the is done by the phone system.

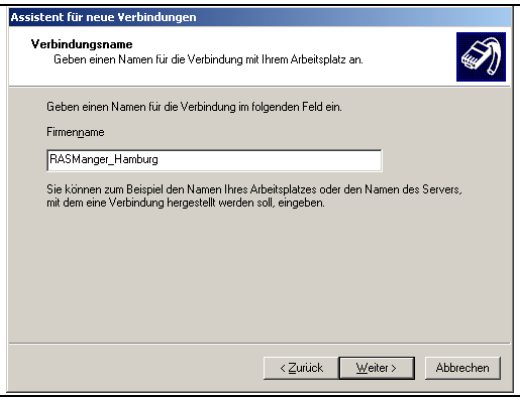
Client connection setup under Windows2000/ XP and 2003


Assistent für neue Verbindungen
Netzwerkverbindungstyp
Wie möchten Sie vorgehen?
Verbindung mit dem Internet herstellen
Stellt eine Verbindung mit dem Internet her, so dass Sie den Browser verwenden und E-Mail lesen können.
Verbindung mit dem Netzwerk am Arbeitsplatz herstellen
Stellt eine Verbindung mit einem Firmennetzwerk (über eine DFÜ- oder VPN-Verbindung) her, so dass Sie von zu Hause oder unterwegs arbeiten können.
Ein Heim- oder ein kleines Firmennetzwerk einrichten
Stellt eine Verbindung mit einem bestehenden Heim- oder kleinem Firmennetzwerk her oder richtet eine neue Verbindung ein.
Eine erweiterte Verbindung einrichten
Stellt eine direkte Verbindung mit einem anderen Computer über einen seriellen, parallelen oder Infrarotanschluss her oder richtet diesen Computer so ein, dass andere Computer darauf zugreifen können.
< Zurück
Weiter >
Abbrechen

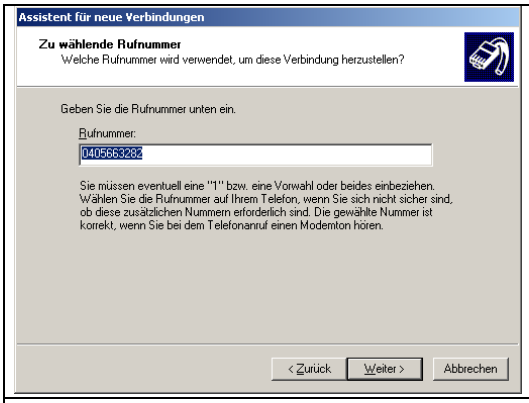

Assistent für neue Verbindungen
Netzwerkverbindung
Wie soll die Netzwerkverbindung am Arbeitsplatz hergestellt werden?
Folgende Verbindung erstellen:
DFÜ-Verbindung
Stellt eine Verbindung über ein Modem und eine reguläre Telefonleitung oder über eine ISDN-Telefonleitung her.
VPN-Verbindung
Stellt eine Netzwerkverbindung mit einer VPN-Verbindung (Virtual Private Network) über eine Internetverbindung her.
< Zurück
Weiter >
Abbrechen

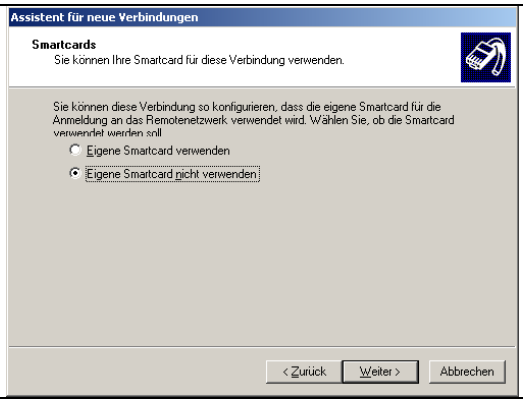
Start the Network connection wizard in the control panel. Select the option: „Dial-up to private network “. Select DFÜ as connection type.


Assistent für neue Verbindungen
Gerät auswählen
Dieses Gerät wird zum Herstellen der Verbindung verwendet.
Sie haben mehr als ein DFÜ-Gerät am Computer angeschlossen.
Wählen Sie die Geräte, die für diese Verbindung verwendet werden sollen:
Modem - AVM ISDN Internet (PPP over ISDN) (AVMISDN1)
Modem - AVM ISDN Mailbox (X.75) (AVMISDN4)
Modem - AVM ISDN RAS (PPP over ISDN) (AVMISDN2)
Modem - AVM ISDN SoftCompression X.75/V.42bis (AVMISDN3)
Modem - MicroLink 56k Internet II (COM1)
< Zurück
Weiter >
Abbrechen


Assistent für neue Verbindungen
Verbindungsname
Geben einen Namen für die Verbindung mit Ihrem Arbeitsplatz an.
Geben einen Namen für die Verbindung im folgenden Feld ein.
Firmenname
RASManger_Hamburg
Sie können zum Beispiel den Namen Ihres Arbeitsplatzes oder den Namen des Servers, mit dem eine Verbindung hergestellt werden soll, eingeben.
< Zurück
Weiter >
Abbrechen

Select the appropriate device and give the connection a name.


Assistent für neue Verbindungen
Zu wählende Rufnummer
Welche Rufnummer wird verwendet, um diese Verbindung herzustellen?
Geben Sie die Rufnummer unten ein.
Rufnummer:
0405663282
Sie müssen eventuell eine "1" bzw. eine Vorwahl oder beides einbeziehen. Wählen Sie die Rufnummer auf Ihrem Telefon, wenn Sie sich nicht sicher sind, ob diese zusätzlichen Nummern erforderlich sind. Die gewählte Nummer ist korrekt, wenn Sie bei dem Telefonanruf einen Modemton hören.
< Zurück
Weiter >
Abbrechen

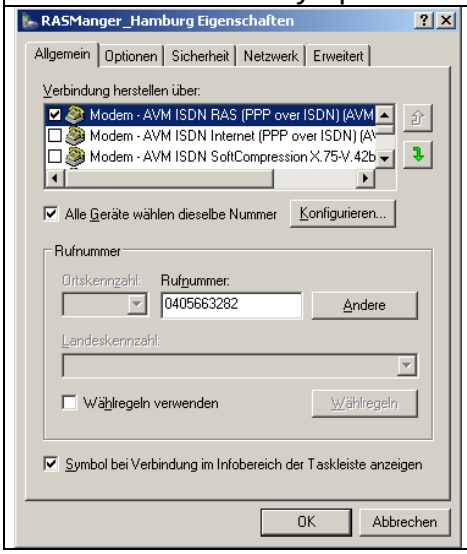

Assistent für neue Verbindungen
Smartcards
Sie können Ihre Smartcard für diese Verbindung verwenden.
Sie können diese Verbindung so konfigurieren, dass die eigene Smartcard für die Anmeldung an das Remotenetzwerk verwendet wird. Wählen Sie, ob die Smartcard verwendet werden soll
Eigene Smartcard verwenden
Eigene Smartcard nicht verwenden
< Zurück
Weiter >
Abbrechen

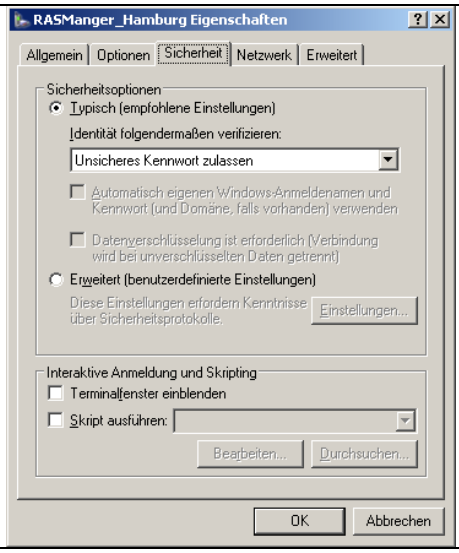
Finally, enter the telephone number under which the RAS Manager can be reached and do not use any smartcard functions.

2.3 Connecting to the RASManager

After starting the RAS client connection you will be asked to enter the user name and password. This information should match the entries in the PPP-Server settings. Activate the save name and password check box for future use.

Finally, configure the security tab of the connection properties window so that the typical settings allow for the acceptance of “unsafe passwords” in the drop down menu of the securtity options.





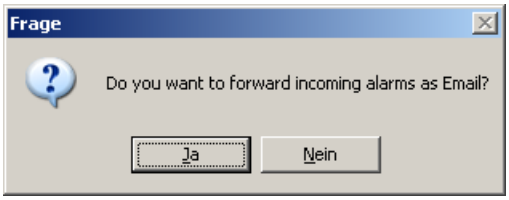
2.4 RAS Control setup

The Setup of the RAS Control program group is for the greater part fully automated with the requirement of just a few user defined settings.

Wählen Sie eine Setup-Sprache aus
Wählen Sie die Sprache für die Installation aus der unten aufgeführten Auswahl aus.
Deutsch
OK
Abbrechen

2.4.1 gRAS Option for automatically relaying Alarms

All alarms can be set to be forwarded per default during installation by clicking yes to the following option.

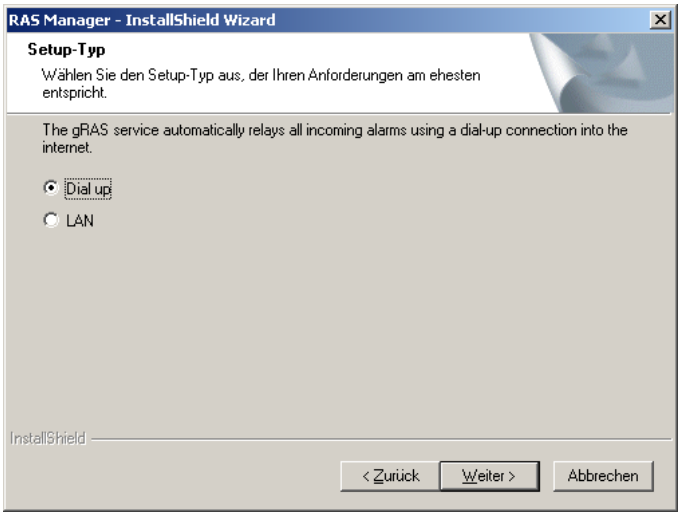


If the log file entries and message boxes are sufficient then answer no to this option. This determines how QBLAT will be configured. A yes to this option will activate QBLAT.

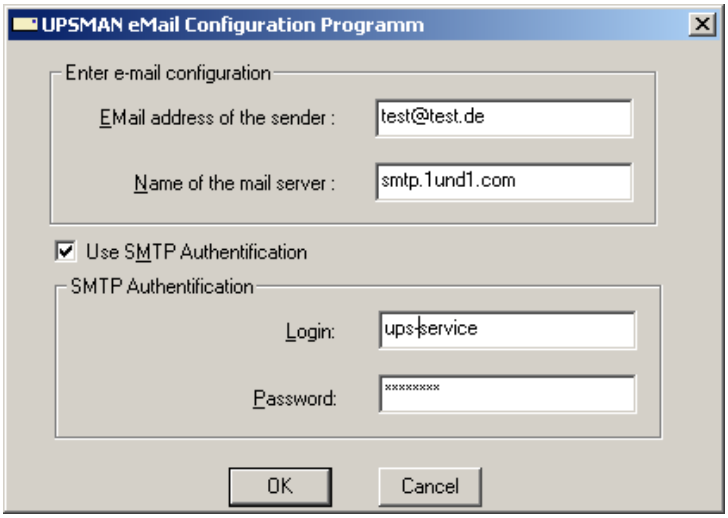
2.4.2 Alarm relaying per Modem or LAN

Two options are available for the relaying of alarms per email:

If LAN is available then select it. Otherwise, if it is necessary to send emails using a dial-up connection then select this option and continue.


RAS Manager - InstallShield Wizard
Setup-Typ
Wählen Sie den Setup-Typ aus, der Ihren Anforderungen am ehesten entspricht.
The gRAS service automatically relays all incoming alarms using a dial-up connection into the internet.
Dial up
LAN
InstallShield
< Zurück
Weiter >
Abbrechen

Next, enter the SMTP Server information.

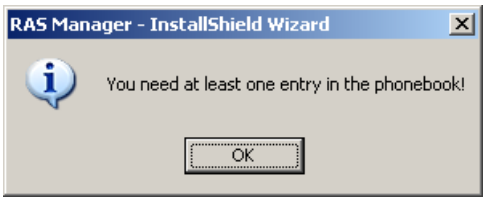


This completes the installation for the LAN option.

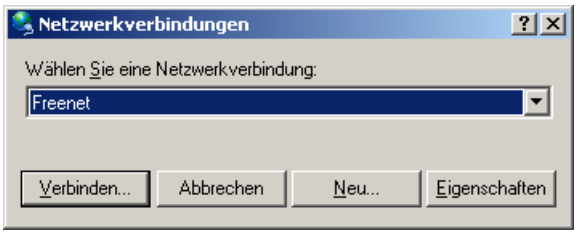
2.4.3 Phonebook

This section continues the setup for the option Dialup. The Phonebook entry RAS Control group is a special link to the Windows Program PHONEBOOK. The first time this program is started, the file rasphone.pbk is created after which the Windows connection wizard is started for creating a connection and entry for this phonebook.

At least one entry must be made in the rasphone.pbk Windows Telephone book inorder for the installation to be completed successfully. The connection will be used later for the relaying of alarms.

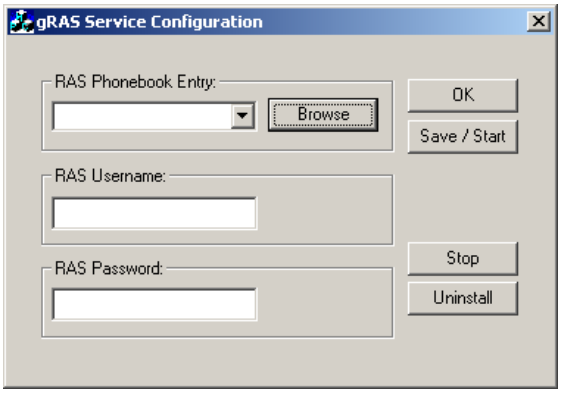


If no entry is yet available, a new connection can be made using this link at anytime. If the connection already exists simply cancel the next step.

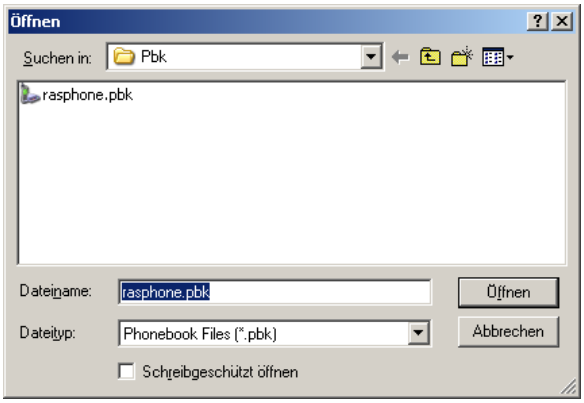


2.4.4 gRAS monitoring

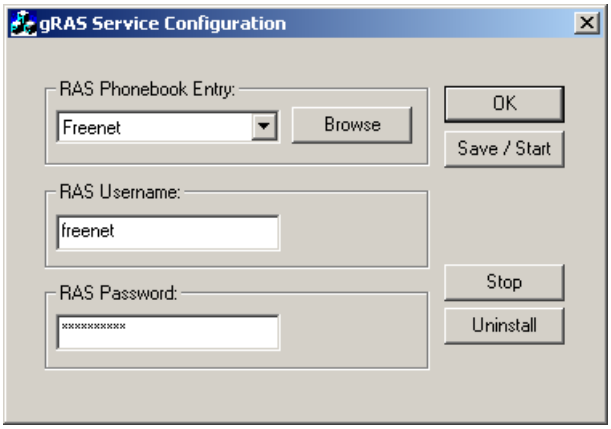
The gRAS Service monitores incoming alarms and establishes an internet connection for the forwarding of alarms once an alarm has been detected.



For this purpose the Phonebook must be selected when browsing.



Afterwards select the appropiate connection and enter the user access data for the selected connection.



After completing these steps the service is initiated by clicking the „Save/ Start“ button, and the installation is ended by clicking „Ok“.

3 Functions and Usage

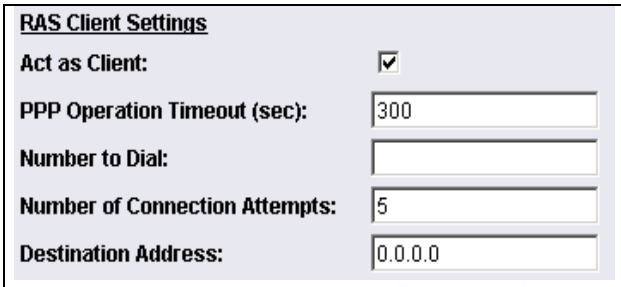
In this section, it is assumed that the RASManager and RASControl Software have been successfully installed and configured. Some parts will refer to the adapter user manual.

3.1 Operating modes of the RAS Manager

The RASManager can operate in three different modes:
Client mode
Server mode
Callback mode
All of these functions are only available after a valid license code has been entered into the adapter. Which of these modes and in which combination they are used is determined by the user.
Notice: These functions were designed for static IP–Addresses.

3.1.1 Client mode

In Client mode the RAS Manager will call the computer specified by the „Destination Address“ entry.



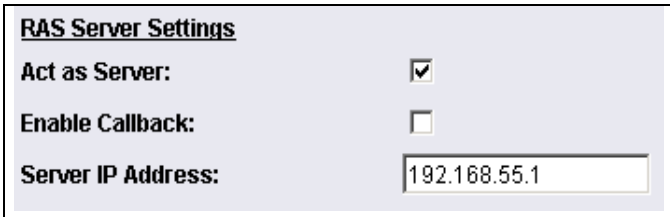
RAS Configuration: RAS Client Settings, Destination Address

The RAS Manager will dial-up as Client if:

-the RAS Manager receives a call and has been configured for Call back mode in the „RAS Server Settings“.
-an Event occurs for which a Job has been defined requiring the relaying of a message or command to an IP address matching that of the „Destination Address“.
-the RAS Manager is to send an Email and the IP-Address of the Email-Server in the „Email settings“ matches the IP set in the „Destination Address“ of the RAS client settings.

3.1.2 Server mode

When only the „Act as Server“ box is checked in the RAS Server Settings then the RAS Manager will answer incoming calls and make its functions available to the client with the address matching the „Server IP Address“. Other configuration settings may also be necessary to insure this function. These settings are configured in the „Network and Securities Settings“ section of the adapter (see user manual).



RAS Configuration: RAS Client Settings, Server IP Address

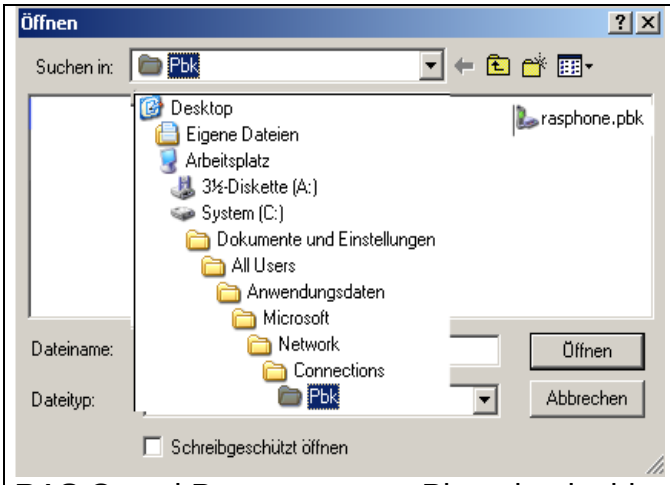
3.1.3 Callback mode

Checking the „Enable Callback“ box will cause the RAS Manager to no longer answer the incoming calls. Instead, once the incoming call ceases, the RAS Manager will dial-up ("Callback") the connection specified in the „RAS Client Settings“.

3.2 Functions of the RAS Control Software group

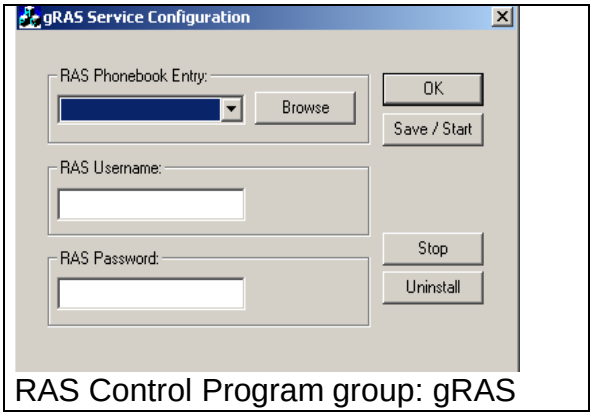
3.2.1 Phonebook

The Phonebook link in the RAS Control Program group is a special link to the Windows-component "Phonebook" that starts the windows connection wizard for the purpose of establishing a valid modem connection entry in the "rasphone.pbk" file. These entries are then made specifically for gRAS and RAS Control.



RAS Contol Program group: Phonebook.pbk

3.2.2 gRAS



RAS Control Program group: gRAS

gRAS is a service that monitors and relays incoming alarms via modem automatically. Once an alarm has been registered, gRAS will initiate a RAS connection and send emails in accordance with specifications made during the installation of gRAS and/or in accordance with specifications made using RAS Control in the „Alarm settings“. This is only relevant for installations using the "Dialup Connection" option (see section 3.2.3, point 7.8)

3.2.3 RAS Control

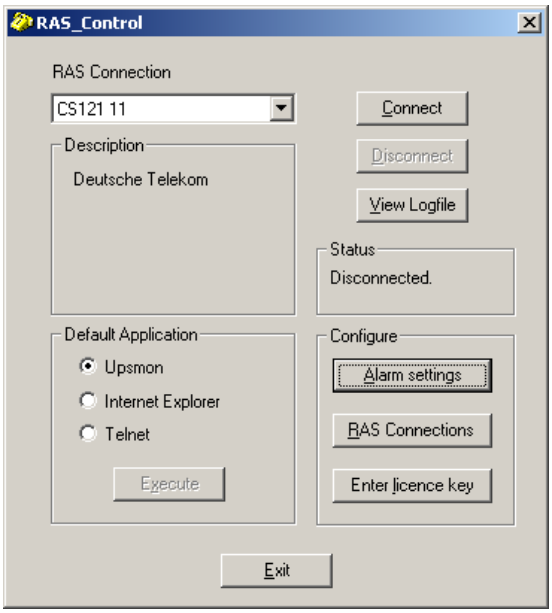
RAS Control unites two different functions into one convenient interface.

Establishing connections to RAS Managers, that have been entered into the rasphone.pbk file. This can be done as a result of direct connection or as Callback.

Configuration of Alarm receivers.

The connections made using RAS Control can be used for different purposes: Starting standard applications Internet Explorer, UPSMON or Telnet that then connect to the predefined IP-Address or for executing user defined programs. If operating in Callback-Modus, the call will signal the computer to call back. Meanwhile, RAS Control will waite until a connection has been established. The callback mode is used in situations requiring higher levels of security. In Callback-Modus no options for automating different operations are made available due to security issues, any actions to be take are leftup to the user. Ofcourse, all RAS Control connections can also be disconnected. In this case, all processes started by RAS Control are then terminated as well.
By incoming alarms the program "batchgen" is started via RCCMD. Batchgen then either sends the emails specified in the "batch.ini" file by itself in the cas of a LAN setup or generates the necessary batch files that will enact gRAS. If gRAS is activated, it continuously checks for the appearance of such batch files. Upon detection of such a batch-file, gRas establishes RAS connection and executes the instructions contained therein.
RAS Control is the configuration interface for "batchgen" which is the key to automating alarm relay process.

3.2.3.1 Using RAS Control



RAS Control: main menu

After starting RAS Control the main menu appears, making the different RAS Control functions available.

1. "RAS Connection": This drop down menu provides a list for selecting a particular RAS Manager to which a connection is to be established. If available the "Description"-area contains information pertaining to the selected RAS Manager.

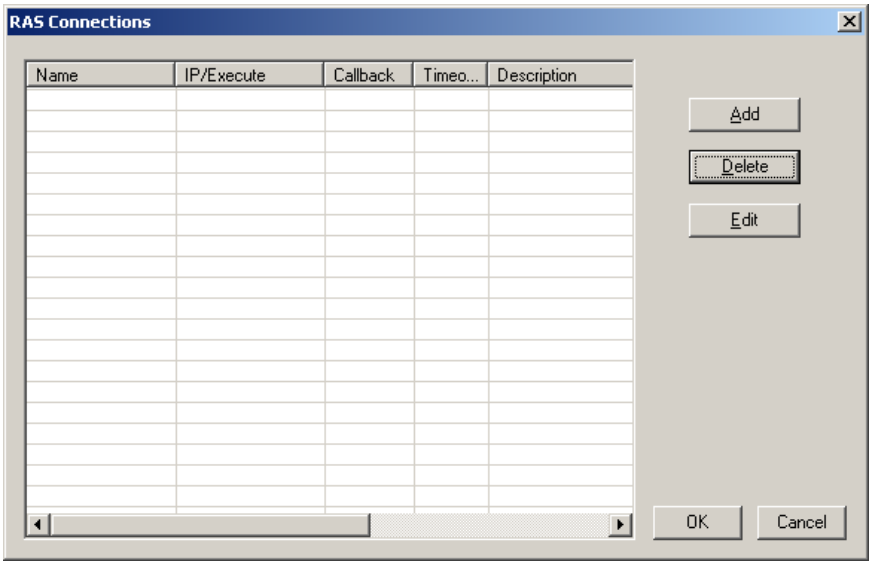
2. "Connect/Disconnect": "Connect" will initiate the connection to the selected RAS Manager and "Disconnect" will do the opposite. When no callback mode is configured for the selected connection, either a default application or user defined action will be executed once the connection has been established. Once the connection is ended all of the applications/processes started by RAS Control will also be ended if possible.

3. "Default Application": This stereo box selection determines which application will be started after establishing a connection. During a connection this area can also be used to start the other default applications (InternetExplorer, UPSMON, telnet) as well using "Execute".

4. "View Logfile": Opens the log file under point 6. in the Notepad-Editor.

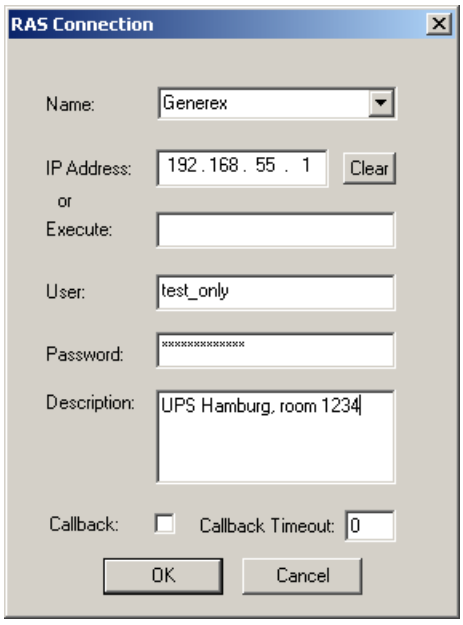
5. "Status": RAS connection status.

6. "RAS Connections": This opens the RAS connection overview.



Overview for "RAS Connections"

6.1 "Add": This adds a new connection entry.



Configuration dialoge for RAS Connections

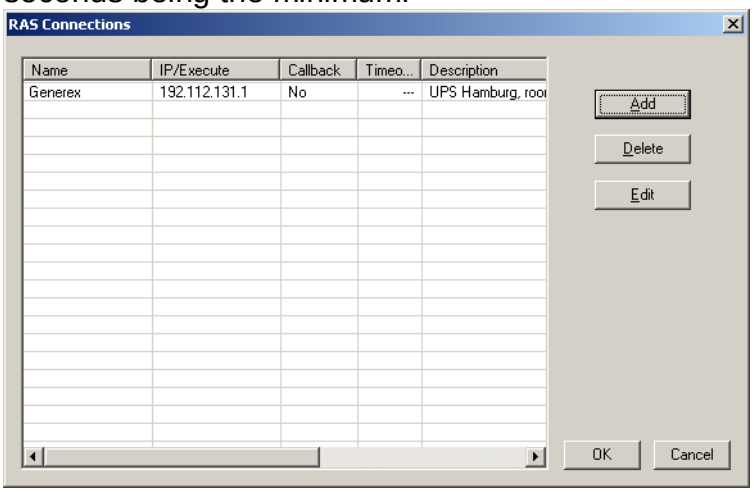
6.1.1 "Name" : This is a drop down menu for selecting the name of an entry made in the RAS Control phone book. The usage of one of the default applications require the entry of an "IP-Address" that match the entry made in the RAS-Manager RAS-Server settings (Default: 192.168.55.1). The execution of user defined processes are to be entered in the “Execute” box. Any entry in the "Execute" field renders the "IP-Address" ineffective and vice versa.

6.1.2 "User" and
6.1.3 "Password" : the correct entries for the corresponding connection must be contained in these fields.

6.1.4 "Description": Anything can be entered into this field for the sake of describing the selected connection.

6.1.5. "Callback: " If the RAS-Manager is in Callback-modus then this check box must be set.

6.1.6 "Callback Timeout": This is the amount of time in seconds that a call should be made in an attempt to triggering the selected RASManager to call back. 30 seconds are recommended for analoge connections and 10 seconds for ISDN with 10 seconds being the minimum.



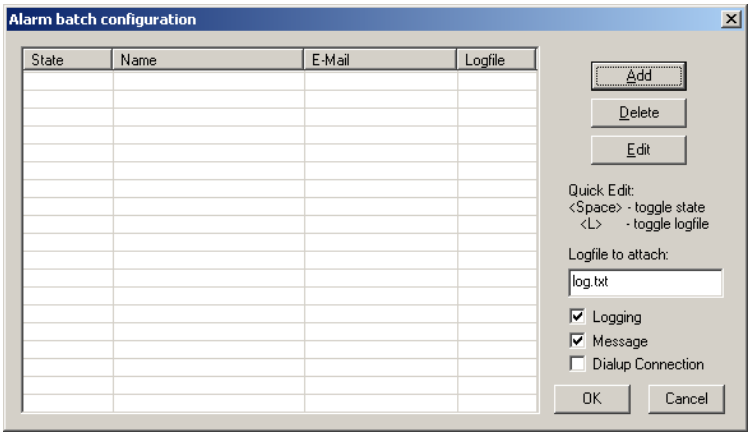
Overview for "RAS Connections"

6.2 "Delete": Deletes the selected entry in the overview table.

6.3 "Edit": Reopens the "Add" configuration window for the purpose of editing the selected entry.

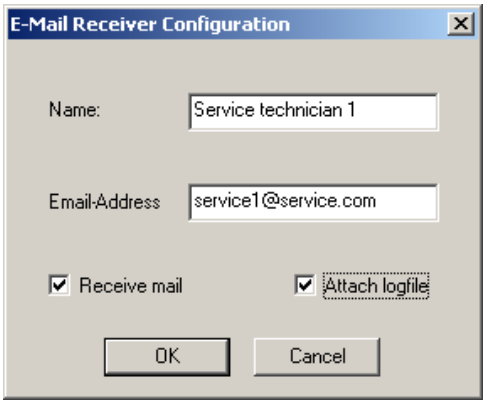
7. "Alarm Settings": Configures “batchgen” and the alarm settings.

Clicking the “Alarm settings” button opens the following dialog:



Overview for Alarm batch configuration

7.1 "Add" : Adds a new alarm recipient.



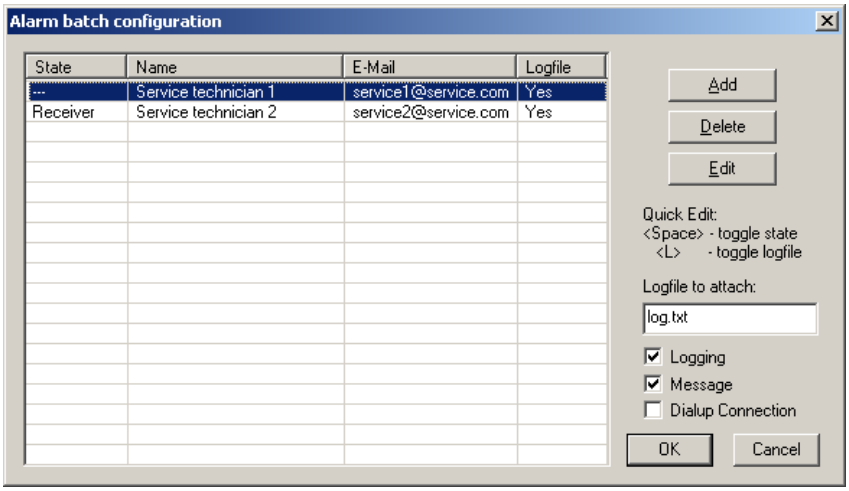
Configuration for Alarm recipient

7.1.1 "Name": Identifies the the alarm recipient.

7.1.2 "Email-Address": Email-Address of the alarm recipient.

7.1.3."Receive mail": Check box to activate the recipients receiving status.

7.1.4 "Attach logfile": Check box for attaching the Logfile to the recipients email (see 7.5).



Overview table for alarm batch configuration

7.2 "Delete": Removes a selected recipient entry.

7.3 "Edit": Opens the selected entry in the add dialog for the sake of editing.

7.4 "Quick Edit": <Space> toggles the recipients status between active=Receiver and inactive=---, and <L> toggles the Logfile attachment between yes and no.

7.5 „Logfile to attach“: This is the name of the logfile to be attached to the email. Default is "log.txt".
7.6 "Logging": When this check box is set all of the incoming alarms are written into a log file.

7.7 "Message": When this check box is set all alarms are accompanied by an alarm signal.

7.8. "Dialup connection": If no LAN connection with internet access is available and the incoming alarms are to be relayed per email then this check box is to be set. This is usually the case when „Dialup Connection“ has been selected during the installation.

8. "Enter licence key": The customer specific license keys are to entered in this section. The standard license provides for 500 entries in the connection list.

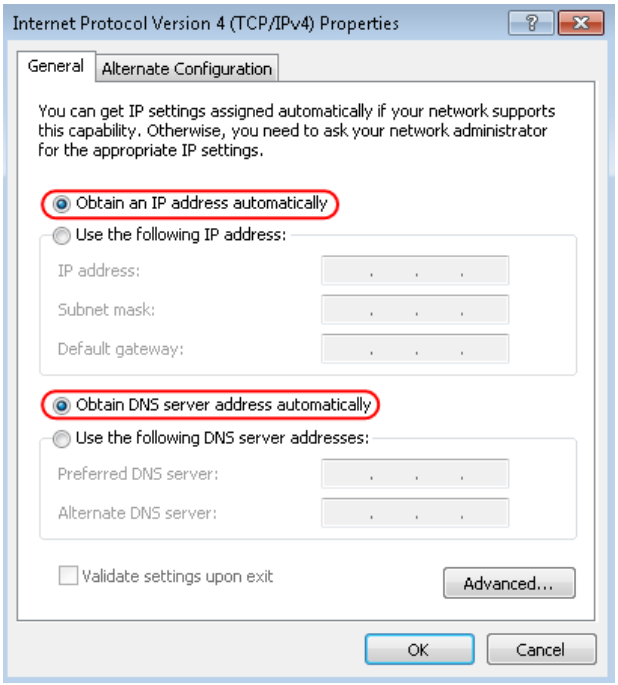
4 RASMAN_GSM Standalone Operation

Hier fehlt die Beschreibung der Funktion :

A. Standalone betrieb – nur SMS : Gerät kann konfiguriert werden das SMS gesendet wird bei Alarm am CS121/BACS und dann auf Anweisungen wartet. Per SMS kann dann Internet GSM Verbindung aktiviert werden und per Webbrowser der CS121/ BACS dann via GSM beobachtet und bedient werden. Vorteil : Damit kann eine preiswerte Prepaid SIM zum Einsatz kommen und eine Flatrate ist nicht notwendig. Nachteil : UNMS kann nur verwendet werden wenn TELESERVICE Option verwendet wird.
B. Standlone Betrieb – dauernd online : Gerät kann bei SIM Karte mit Dataflatrate eine dauernde VErbindung im Internet ermögliochen. Dieser Betrieb ist sinnveoll bei UNMS Softwareeinsatz.
C. Standlone Betrieb – online on demand : Bei Verwendung der UNMS mit Datacenter Option kann auch SIM mit Prepaid eingesetzt werden, hier wird dann das ein/ausschalten der GSM Internetverbindung durch die UNMS initialisiert.

In the following we describe the configuration of the ER75i GSM/EDGE Router.

Connect the router via patch cable with your PC (LAN connection at the rear side). Enable the function “Obtain an IP address automatically” into your network settings → LAN Connection → Local Area Connection Properties → Internet Protocol 4 (TCP/Ipv4) → Properties.


Internet Protocol Version 4 (TCP/IPv4) Properties
General
Alternate Configuration
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Obtain an IP address automatically
Use the following IP address:
IP address:
Subnet mask:
Default gateway:
Obtain DNS server address automatically
Use the following DNS server addresses:
Preferred DNS server:
Alternate DNS server:
Validate settings upon exit
Advanced...
OK
Cancel

Start a web-browser and enter the IP address 192.168.1.1. Use “root” as user and password to get access.

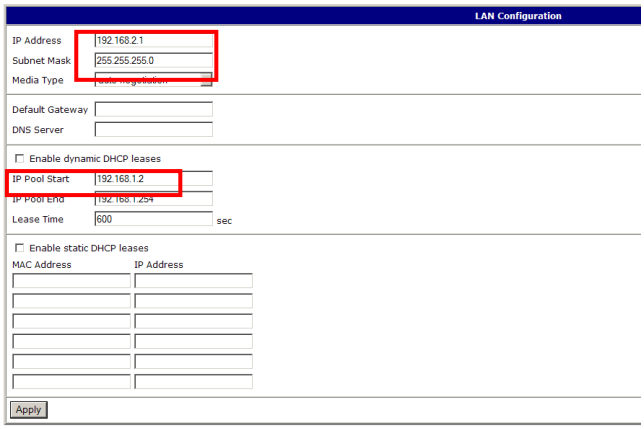
You should change this default password. For security reasons the password should contain digits, numbers and special characters.

Advice:

It is not required to change something on configuration pages, which are not shown here.

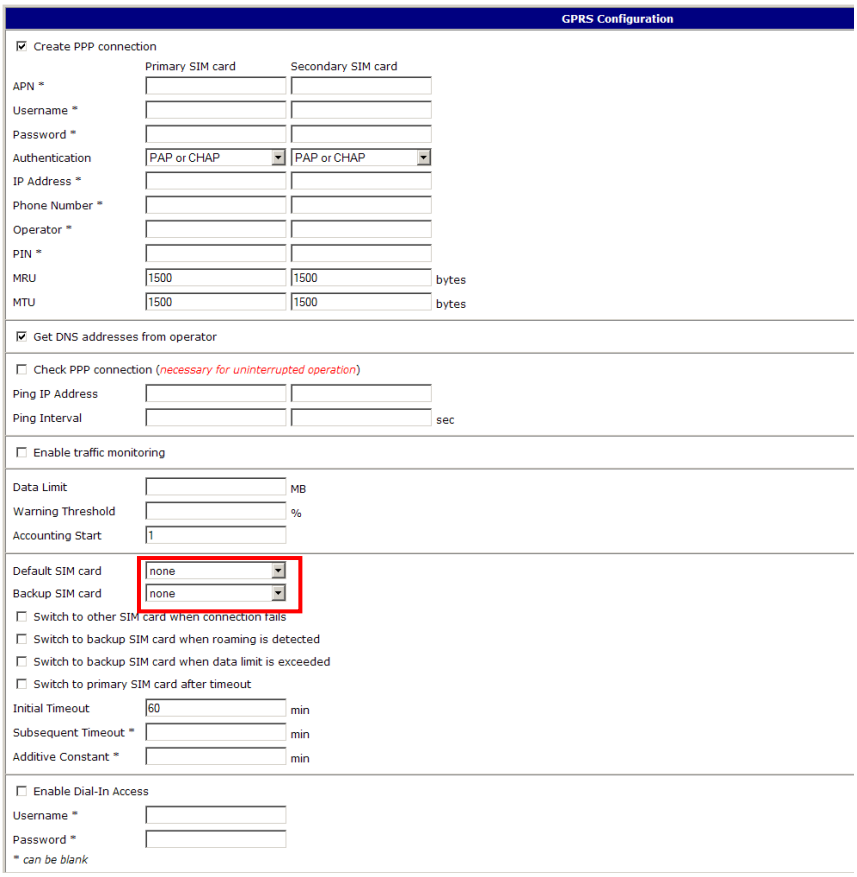
At first the IP address of the router will be determined. Get into the menu “LAN Configuration”. Please note, that it is important, that the IP address is different, if you are using several routers. Because the WAN router got the IP address 192.168.1.1, the GSM/EDGE router can start with 192.168.2.1. You should use progressive IP addresses like UPS 1 = 192.168.2.1, UPS 2 = 192.168.3.1 etc.

DHCP should be disabled!

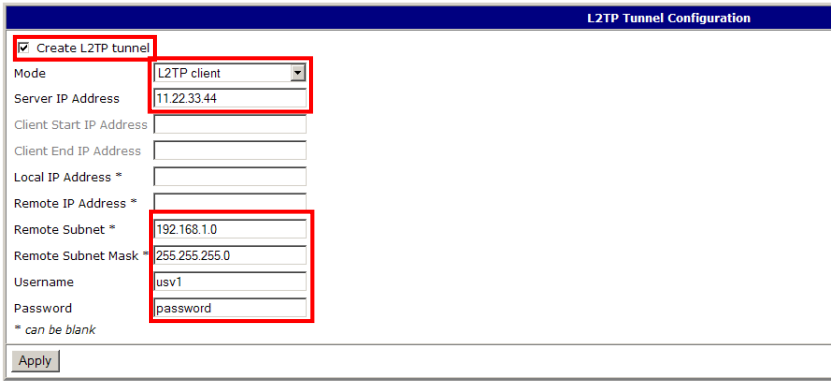


The GSM/EDGE router possesses a SIM card holder. The details of the APN, user name etc. Will be read directly of the SIM card normally. If not, please contact your provider for the right data.

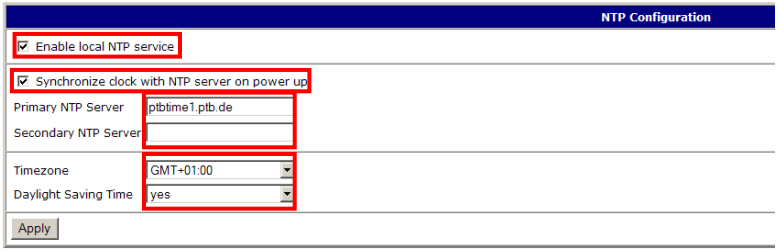
So that the router can be controlled via SMS and will not be establish an internet conection byitself, please set the Default and Backup SIM card to “none”.



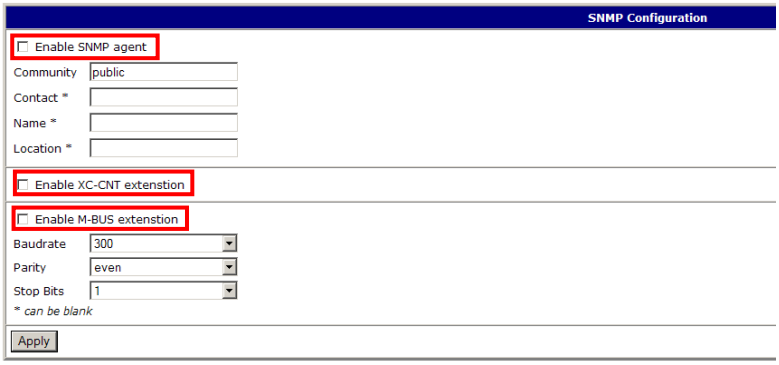
Select the L2TP connection as VPN connection to the WAN router. Enter the IP address of the remote station (WAN router). So that at a later connection all data can be exchanged, it is required to enter the subnet of the WAN router. This is, even at the usage of several GSM routers, always the 192.168.1.0 with the accordant subnet mask. The required access data for the establishment of the connection have to be defined here too.



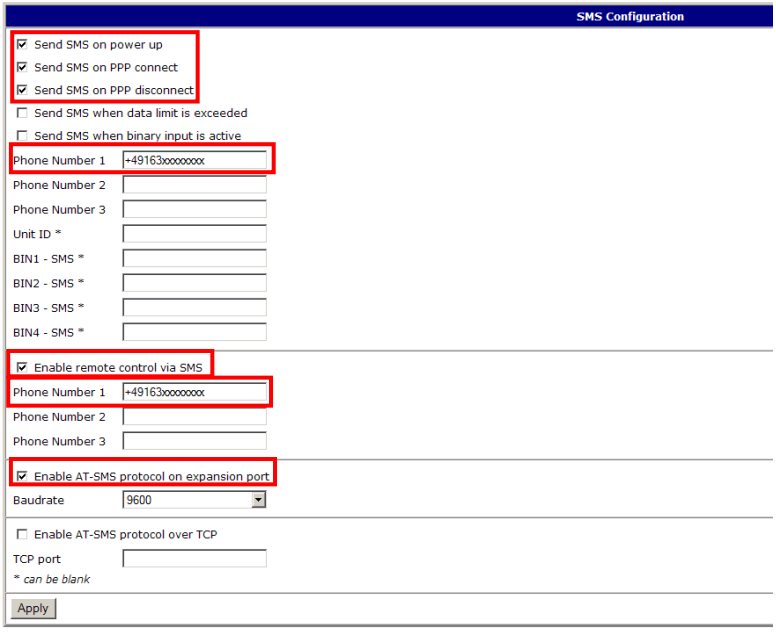
Quote the address/name of an external timeserver from the internet, for the synchronization of the router and the CS121. You will find a lot of public timeservers. The timezone and the DST can be adjusted too.



You can switch off the SNMP server, because it is not required for the monitoring.



Now the SMS control have to be enabled. Activate the below mentioned functions and enter the cell phone numbers, which should be allowed for the SMS controlling. In addition the AT-SMS protocol has to be enabled, because for the forwarding of the CS121 alarm messages.



Save all settings and restart the router.
Attention: After the reboot, the router is available with the configured IP address only. It might be required, that an IP address out of the subnet of the router has to be set.

After the reboot of the router, you will receive a SMS with the text “Router has been powered up”. That means, the router is ready.

To establish an internet connection, send a SMS with the text “go online sim 1” to the router. After a short time, you will receive a SMS with the text “Router has established PPP connection”. The VPN connection to the WAN router will be established automatically now.

To be able to get access via web-browser to the CS121 via VPN tunnel, establish another connection from your PC to the WAN router and enter the IP address of the CS121. The website of the CS121 appears. The buildup of the website depends on the quality of the GPRS connection.

If you got all desired data and the internet connection should be closed, send a SMS with the text “go offline”.

If required, you can reboot the router via SMS with the text “reboot”.

Network settings of the CS121

The network parameter of the CS121 shall be matched with the parameter of the GSM router. If the router was defined for the subnet 192.168.2.0, the CS121 can be defined with the IP address 192.168.2.2 (192.168.2.1 is for the router). You can install up to 254 CS121 behind the subnet of the router. The alarm SMS can be triggered from the CS121 only, which is connected via COM2 to the router. It is required to set the 255.255.255.0 as subnet and the 192.168.2.1 for the gateway (router).
In addition you can define the IP address of the router as timeserver for the CS121. The CS121 synchronizes every 24 hours the time and date.

Connection to the CS121

Connect within the delivered cable (RJ45 to Mini-Dsub9) from port 1 of the router to the COM2 port of the CS121. In addition connect a network cable from the “ETH” port of the router into the RJ45 socket of the CS121.

Therefore the accomodation of your RASMAN_GSM is finished!

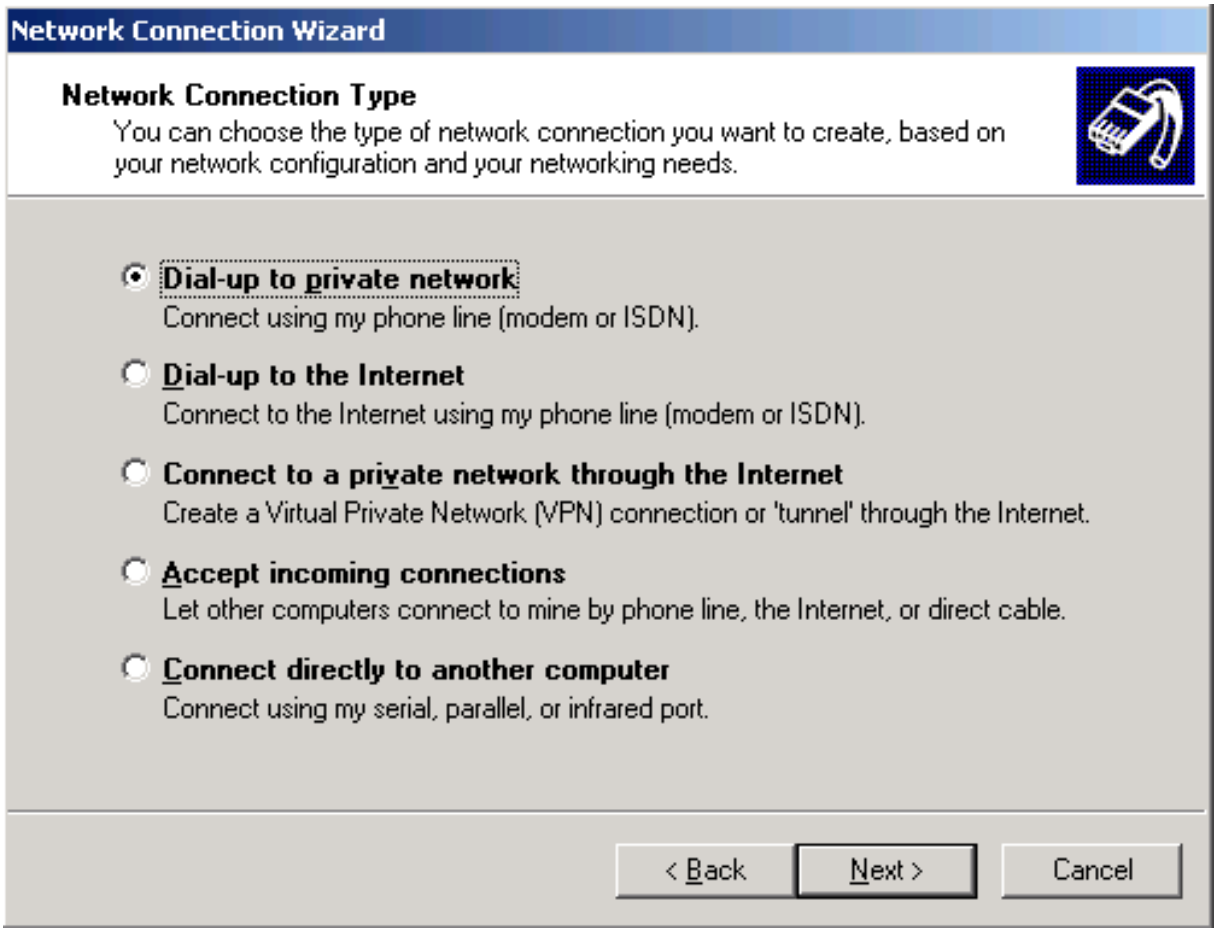
Appendix (sample setup picture sequences)

In the following setup sequences for “dial up” connections, “incoming” calls and RASPhonebook entries some of the pictures are exactly the same and some are slightly different.

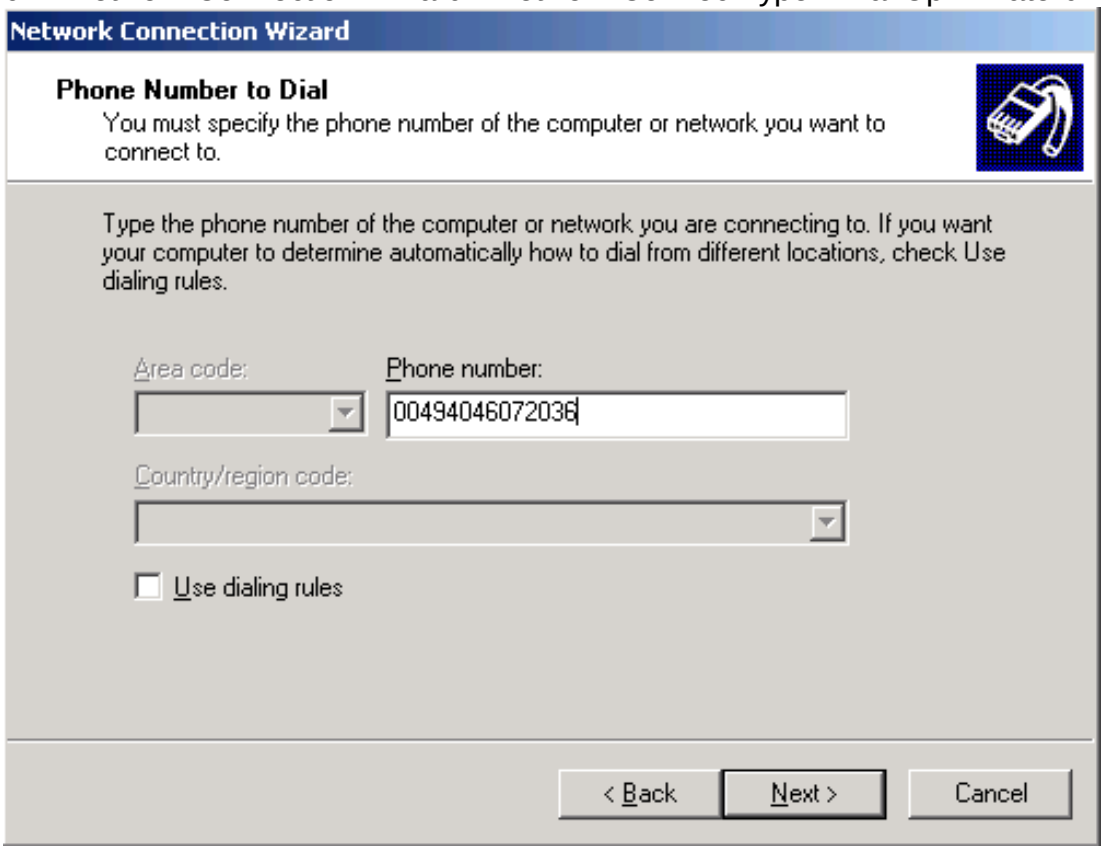
A Dial up 9 steps

Network Connection Wizard
Welcome to the Network Connection Wizard
Using this wizard you can create a connection to other computers and networks, enabling applications such as e-mail, Web browsing, file sharing, and printing.
To continue, click Next.
< Back
Next >
Cancel

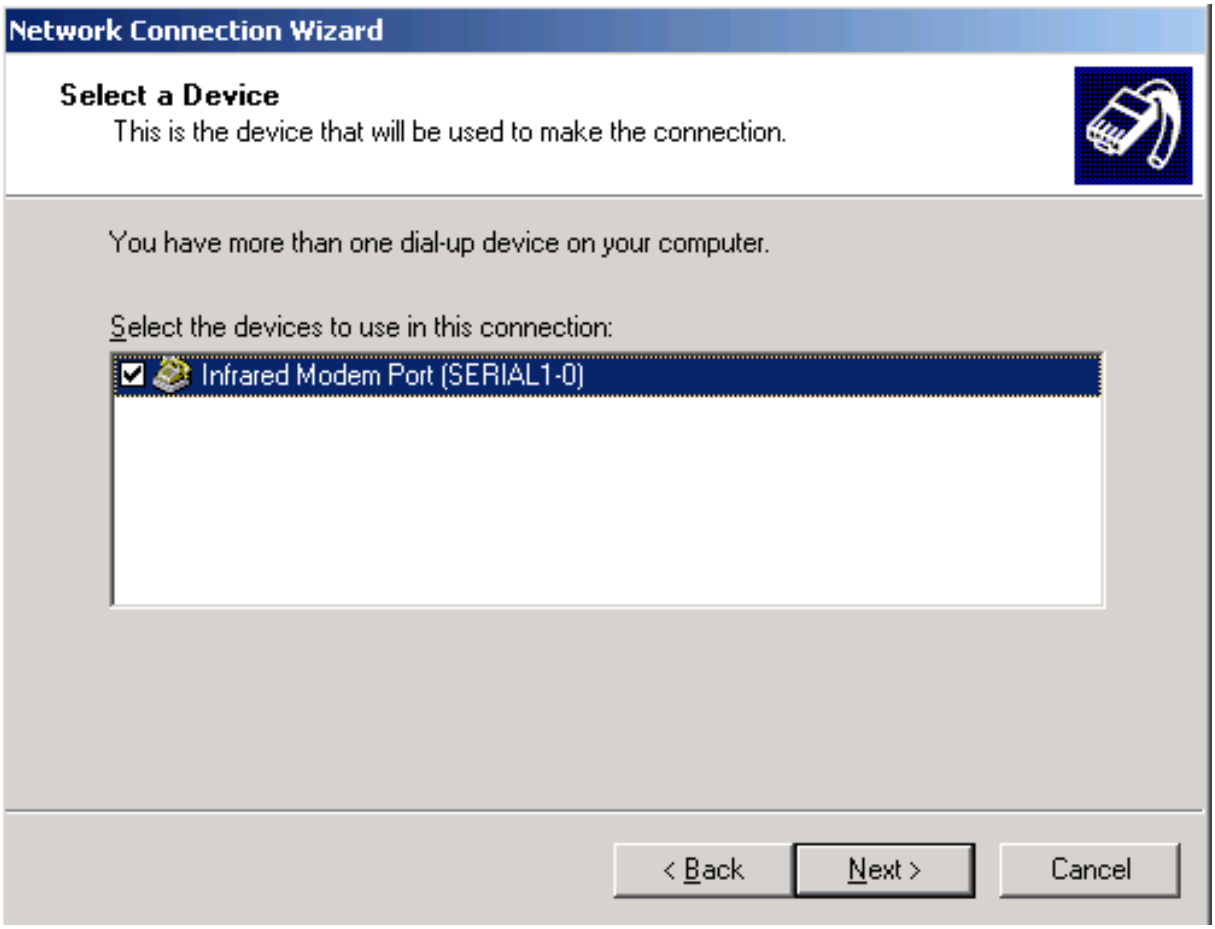
01 - Network Connection Wizard - Welcome.bmp


Network Connection Wizard
Network Connection Type
You can choose the type of network connection you want to create, based on your network configuration and your networking needs.
Dial-up to private network
Connect using my phone line (modem or ISDN).
Dial-up to the Internet
Connect to the Internet using my phone line (modem or ISDN).
Connect to a private network through the Internet
Create a Virtual Private Network (VPN) connection or 'tunnel' through the Internet.
Accept incoming connections
Let other computers connect to mine by phone line, the Internet, or direct cable.
Connect directly to another computer
Connect using my serial, parallel, or infrared port.
< Back
Next >
Cancel

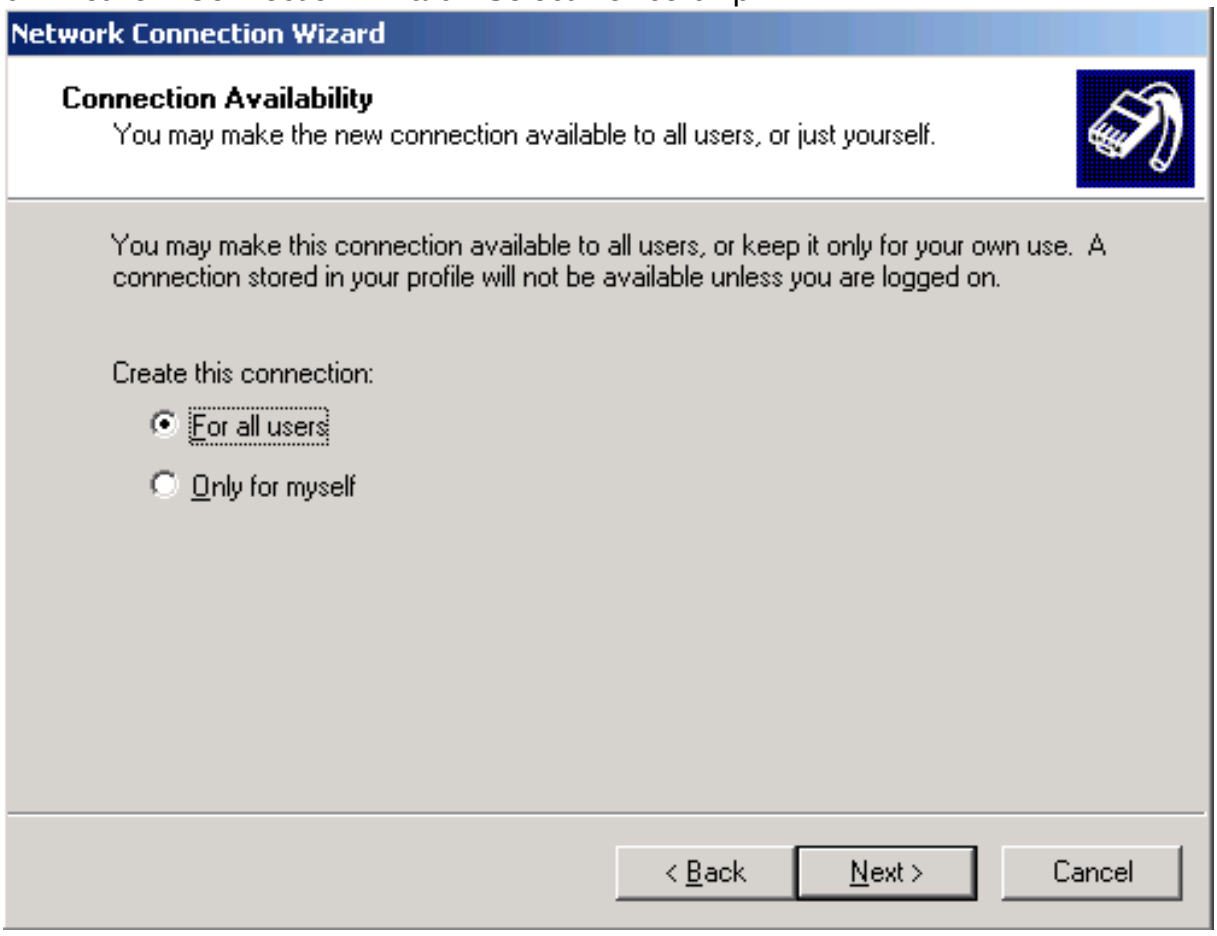
02 - Network Connection Wizard - Network Connec Type - Dial Up Private.bmp


Network Connection Wizard
Phone Number to Dial
You must specify the phone number of the computer or network you want to connect to.
Type the phone number of the computer or network you are connecting to. If you want your computer to determine automatically how to dial from different locations, check Use dialing rules.
Area code:
Phone number:
00494046072036
Country/region code:
Use dialing rules
< Back
Next >
Cancel

03 - Network Connection Wizard - Phonenumber.bmp


Network Connection Wizard
Select a Device
This is the device that will be used to make the connection.
You have more than one dial-up device on your computer.
Select the devices to use in this connection:
Infrared Modem Port (SERIAL1-0)
< Back
Next >
Cancel

04- Network Connection Wizard - Select Device.bmp

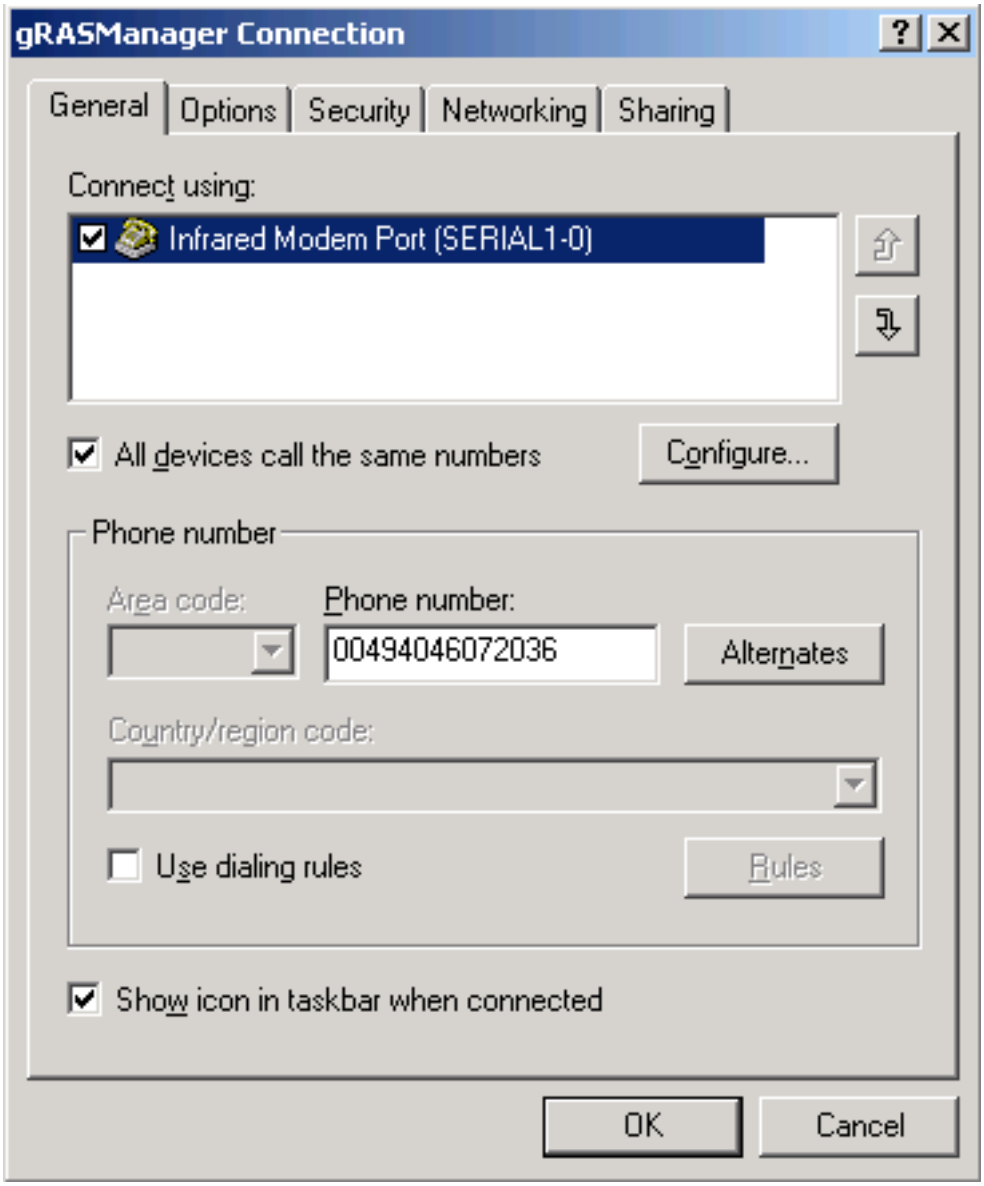

Network Connection Wizard
Connection Availability
You may make the new connection available to all users, or just yourself.
You may make this connection available to all users, or keep it only for your own use. A connection stored in your profile will not be available unless you are logged on.
Create this connection:
For all users
Only for myself
< Back
Next >
Cancel

05 - Network Connection Wizard - Connection Availability.bmp

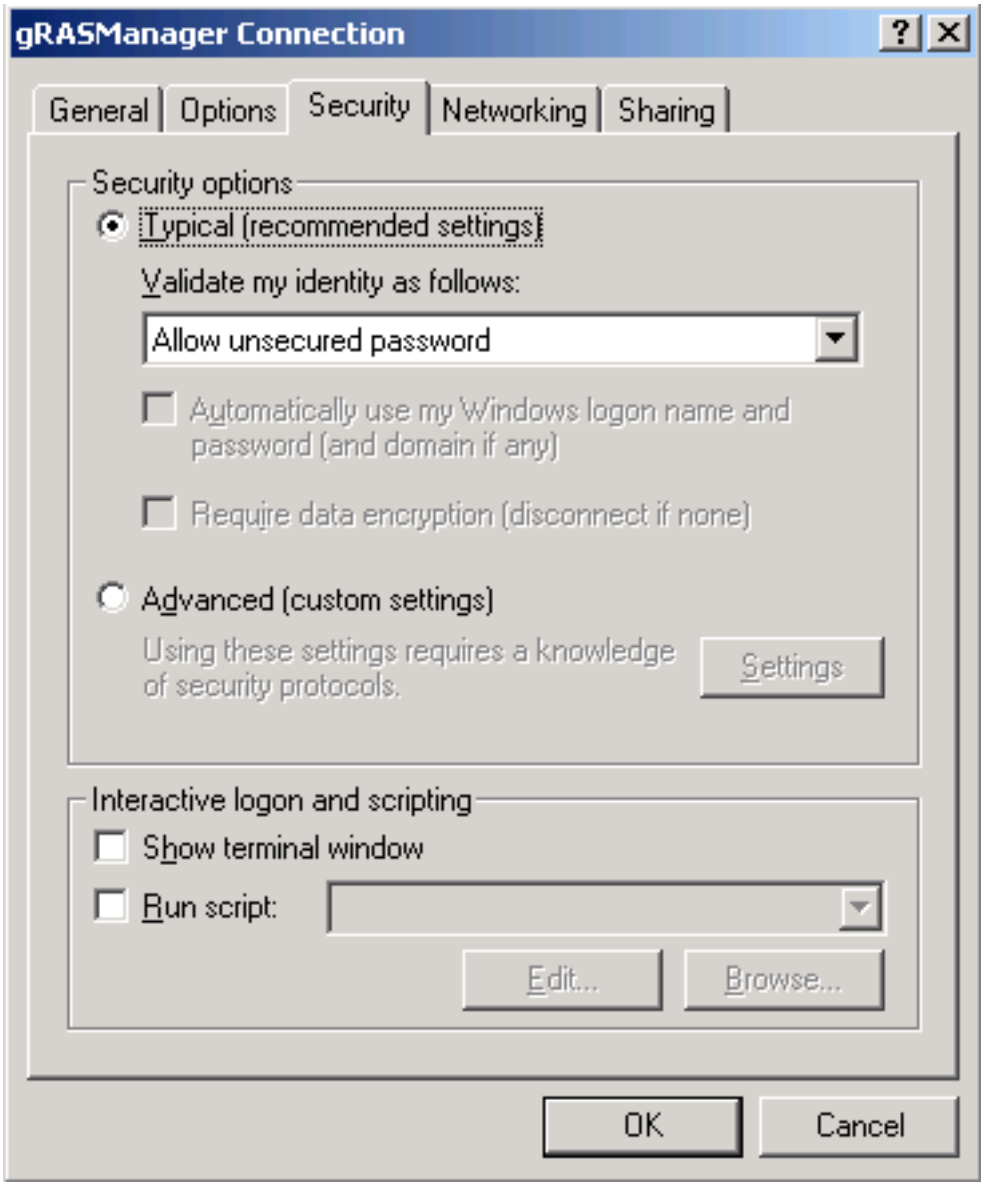
Network Connection Wizard
Completing the Network Connection Wizard
Type the name you want to use for this connection:
gRASManager Connection
To create this connection and save it in the Network and Dial-up Connections folder, click Finish.
To edit this connection in the Network and Dial-up Connections folder, select it, click File, and then click Properties.
Add a shortcut to my desktop
< Back
Finish
Cancel

06 - Network Connection Wizard - Complete.bmp

07 - Network Connection Wizard - Connect Connection.bmp



08 - Network Connection Wizard - Connection Prop.bmp

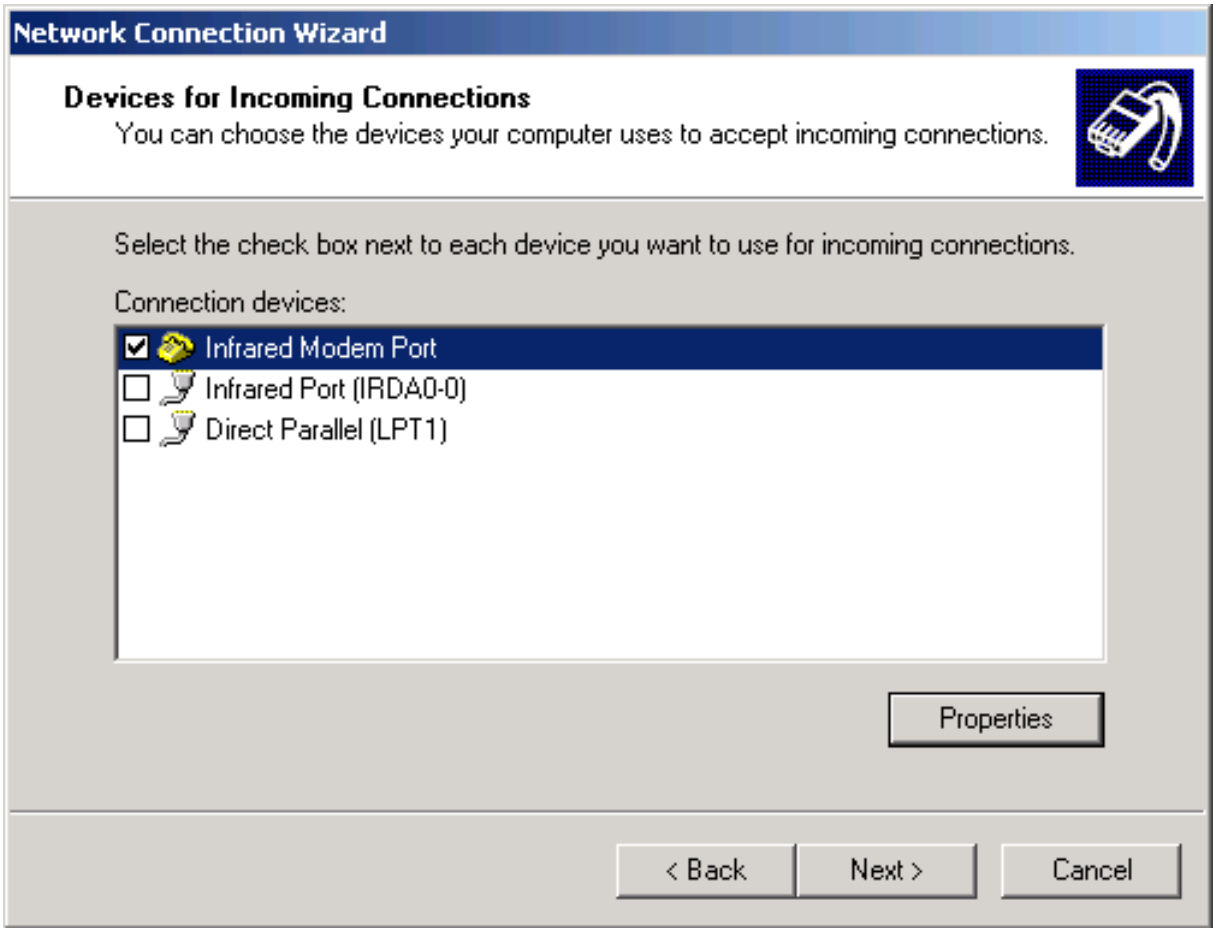


09 - Network Connection Wizard - Connection Prop Security.bmp

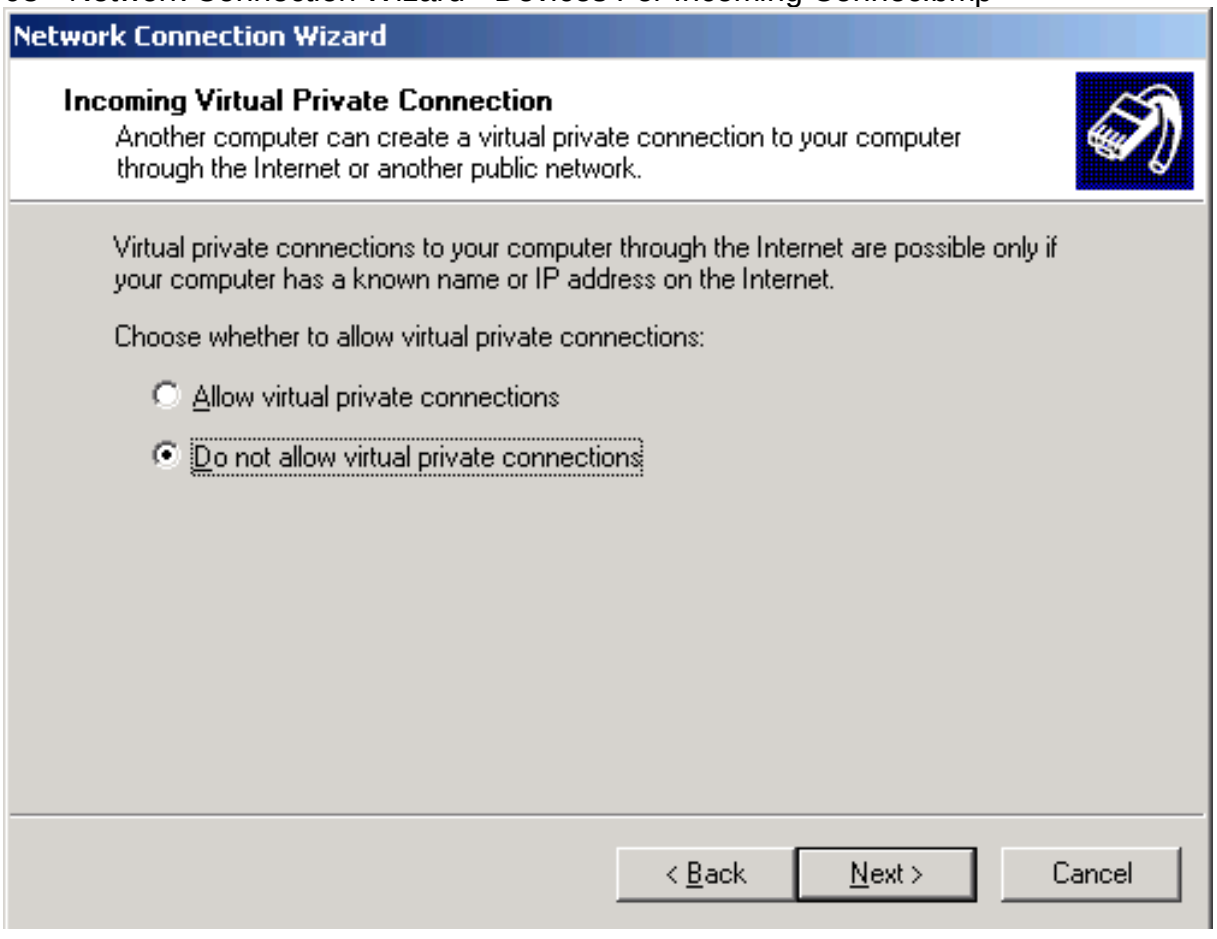
B Incoming 8 steps

01 - Network Connection Wizard - Welcome.bmp (same as dial up picture 01)

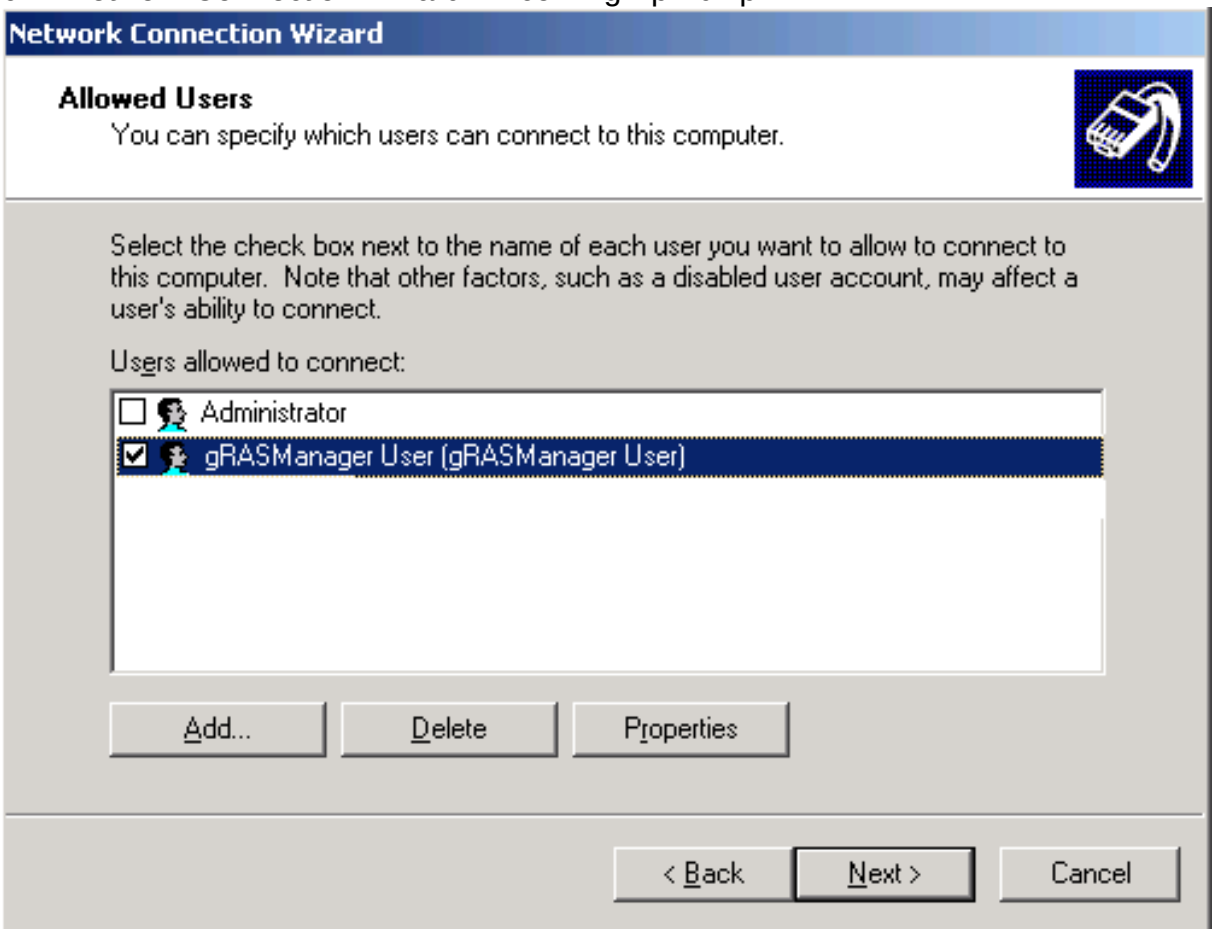
02 - Network Connection Wizard - Network Connec Type - Accept Incoming Connec.bmp (Same as dial up picture 02 but the “Accept Incoming connections” stereo button is set.)


Network Connection Wizard
Devices for Incoming Connections
You can choose the devices your computer uses to accept incoming connections.
Select the check box next to each device you want to use for incoming connections.
Connection devices:
Infrared Modem Port
Infrared Port (IRDA0-0)
Direct Parallel (LPT1)
Properties
< Back
Next >
Cancel

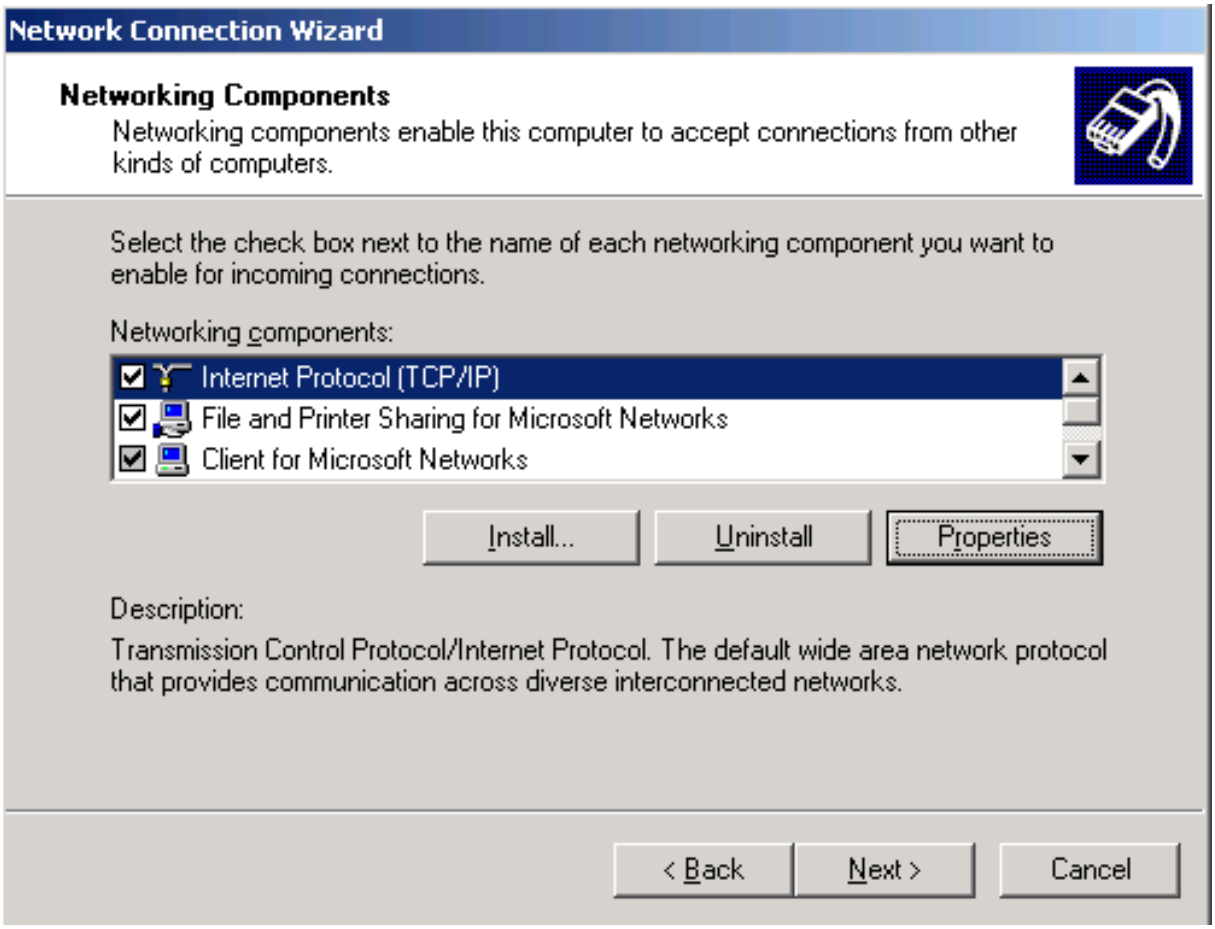
03 - Network Connection Wizard - Devices For Incoming Connec.bmp


Network Connection Wizard
Incoming Virtual Private Connection
Another computer can create a virtual private connection to your computer through the Internet or another public network.
Virtual private connections to your computer through the Internet are possible only if your computer has a known name or IP address on the Internet.
Choose whether to allow virtual private connections:
Allow virtual private connections
Do not allow virtual private connections
< Back
Next >
Cancel

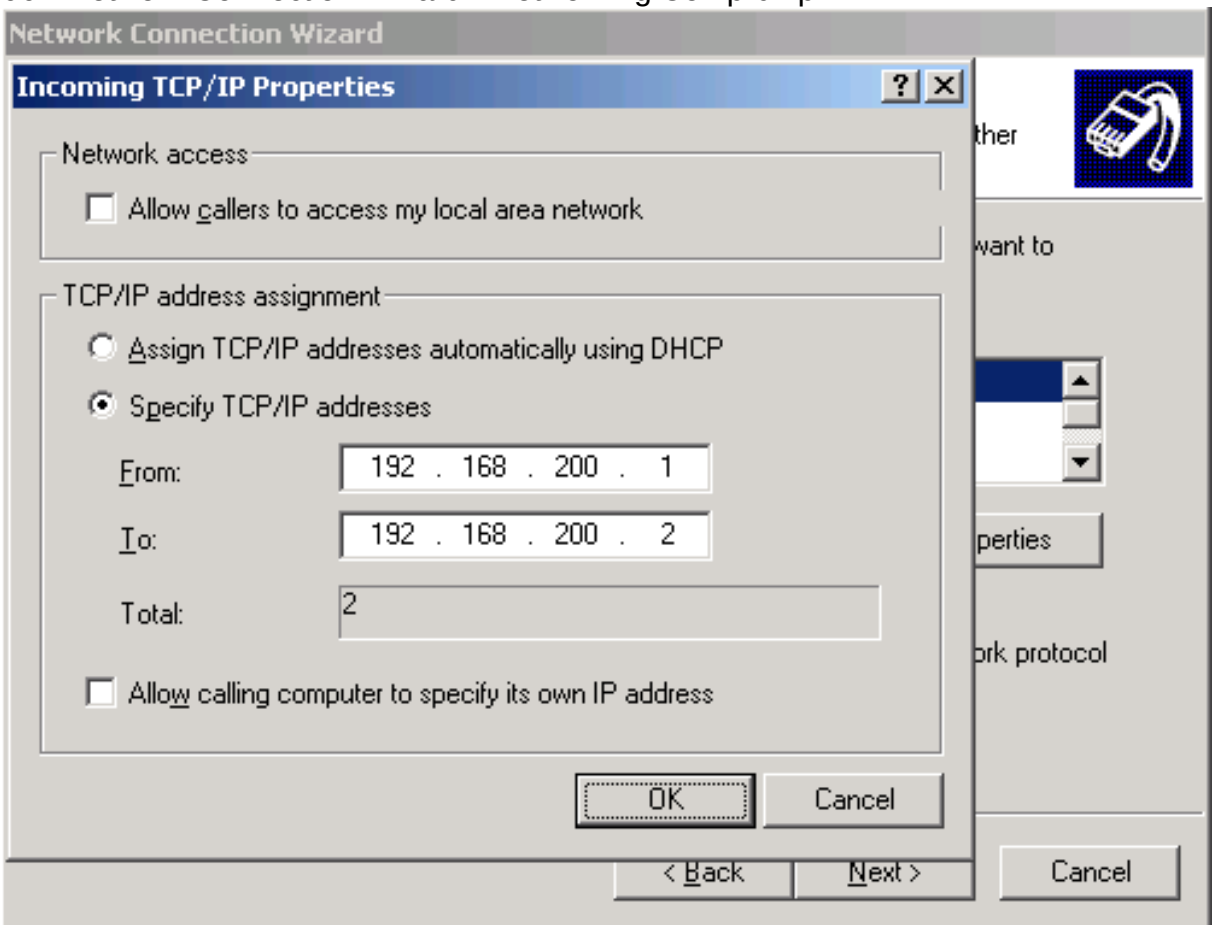
04 - Network Connection Wizard - Incoming Vpn.bmp


Network Connection Wizard
Allowed Users
You can specify which users can connect to this computer.
Select the check box next to the name of each user you want to allow to connect to this computer. Note that other factors, such as a disabled user account, may affect a user's ability to connect.
Users allowed to connect:
Administrator
gRASManager User (gRASManager User)
Add...
Delete
Properties
< Back
Next >
Cancel

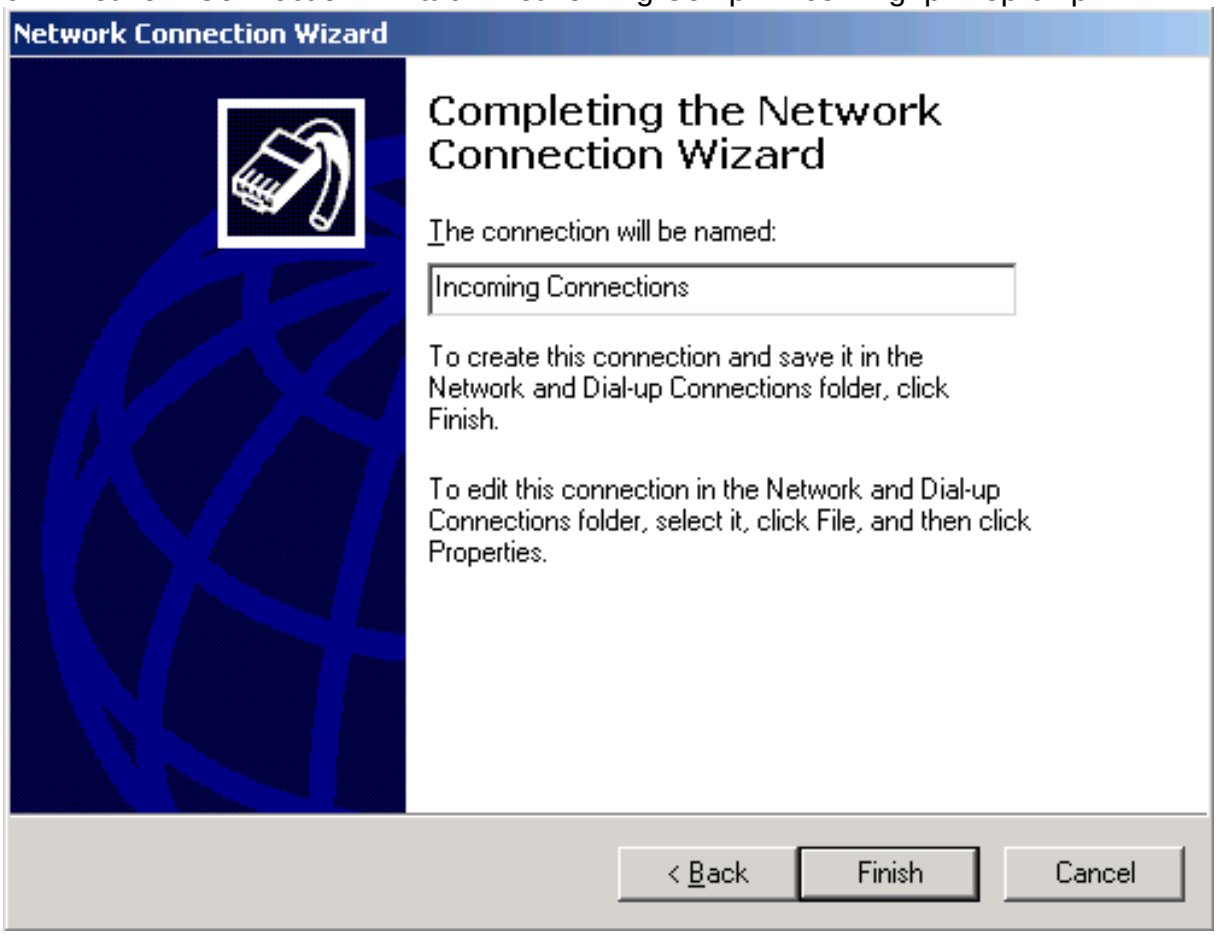
05 - Network Connection Wizard - Allowed Users.bmp


Network Connection Wizard
Networking Components
Networking components enable this computer to accept connections from other kinds of computers.
Select the check box next to the name of each networking component you want to enable for incoming connections.
Networking components:
Internet Protocol (TCP/IP)
File and Printer Sharing for Microsoft Networks
Client for Microsoft Networks
Install...
Uninstall
Properties
Description:
Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.
< Back
Next >
Cancel

06 - Network Connection Wizard - Networking Comp.bmp

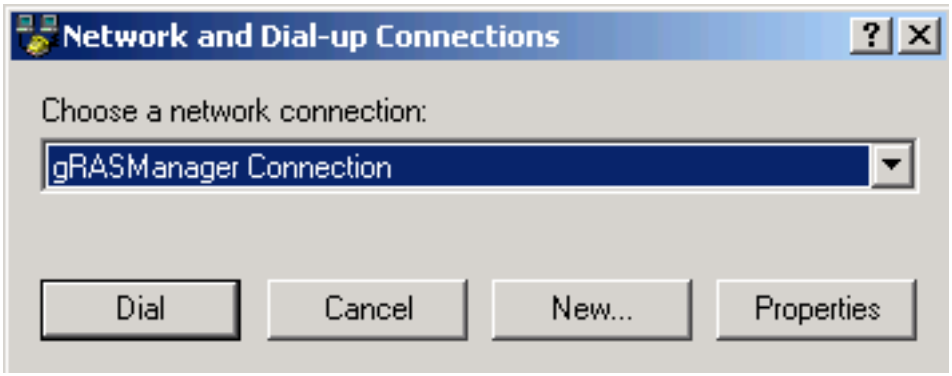

Network Connection Wizard
Incoming TCP/IP Properties
Network access
Allow callers to access my local area network
TCP/IP address assignment
Assign TCP/IP addresses automatically using DHCP
Specify TCP/IP addresses
From: 192 . 168 . 200 . 1
To: 192 . 168 . 200 . 2
Total: 2
Allow calling computer to specify its own IP address
OK
Cancel
< Back
Next >
Cancel

07 - Network Connection Wizard - Networking Comp - Incoming Ip Prop.bmp

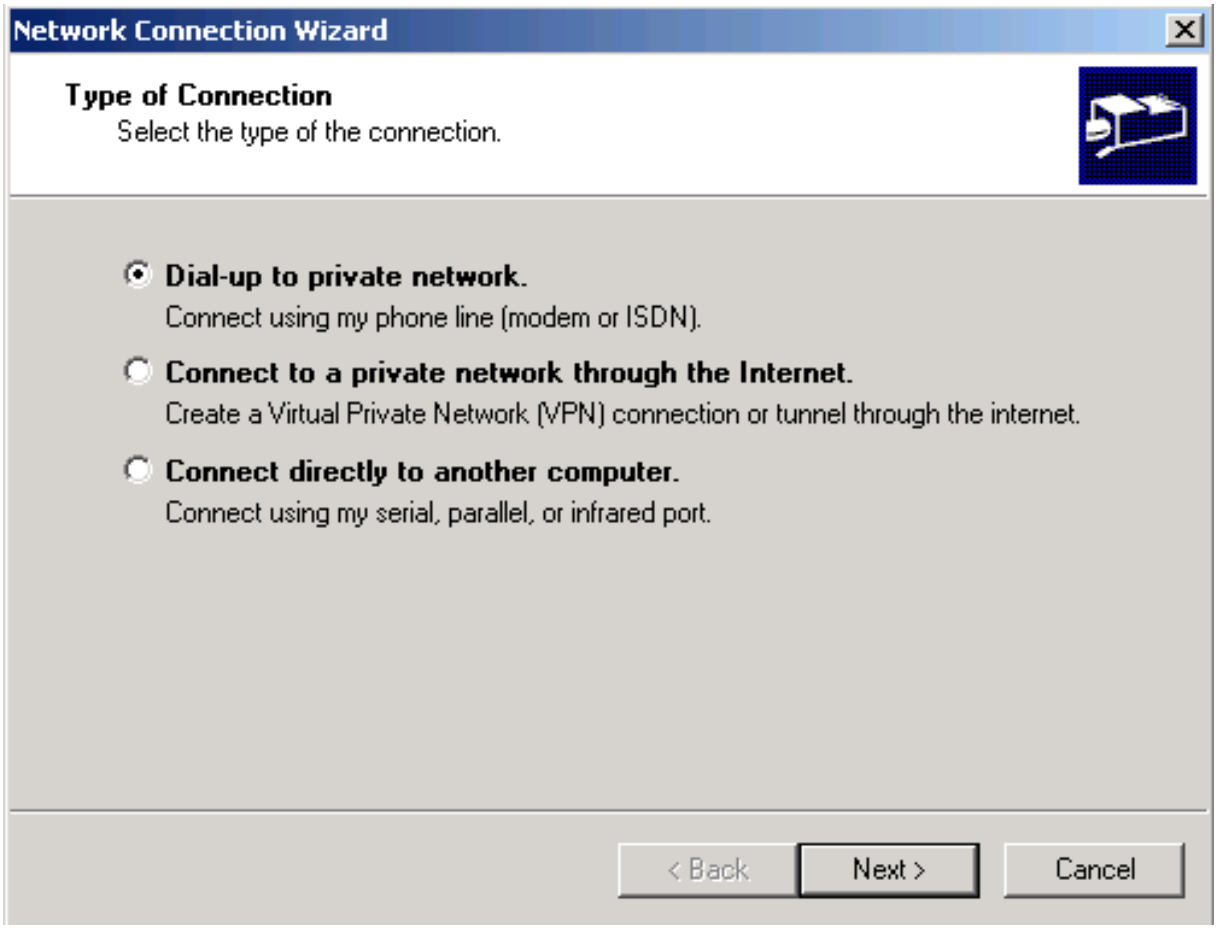

Network Connection Wizard
Completing the Network Connection Wizard
The connection will be named:
Incoming Connections
To create this connection and save it in the Network and Dial-up Connections folder, click Finish.
To edit this connection in the Network and Dial-up Connections folder, select it, click File, and then click Properties.
< Back
Finish
Cancel

08 - Network Connection Wizard - Incoming Complete.bmp

C RASPhone 6 steps

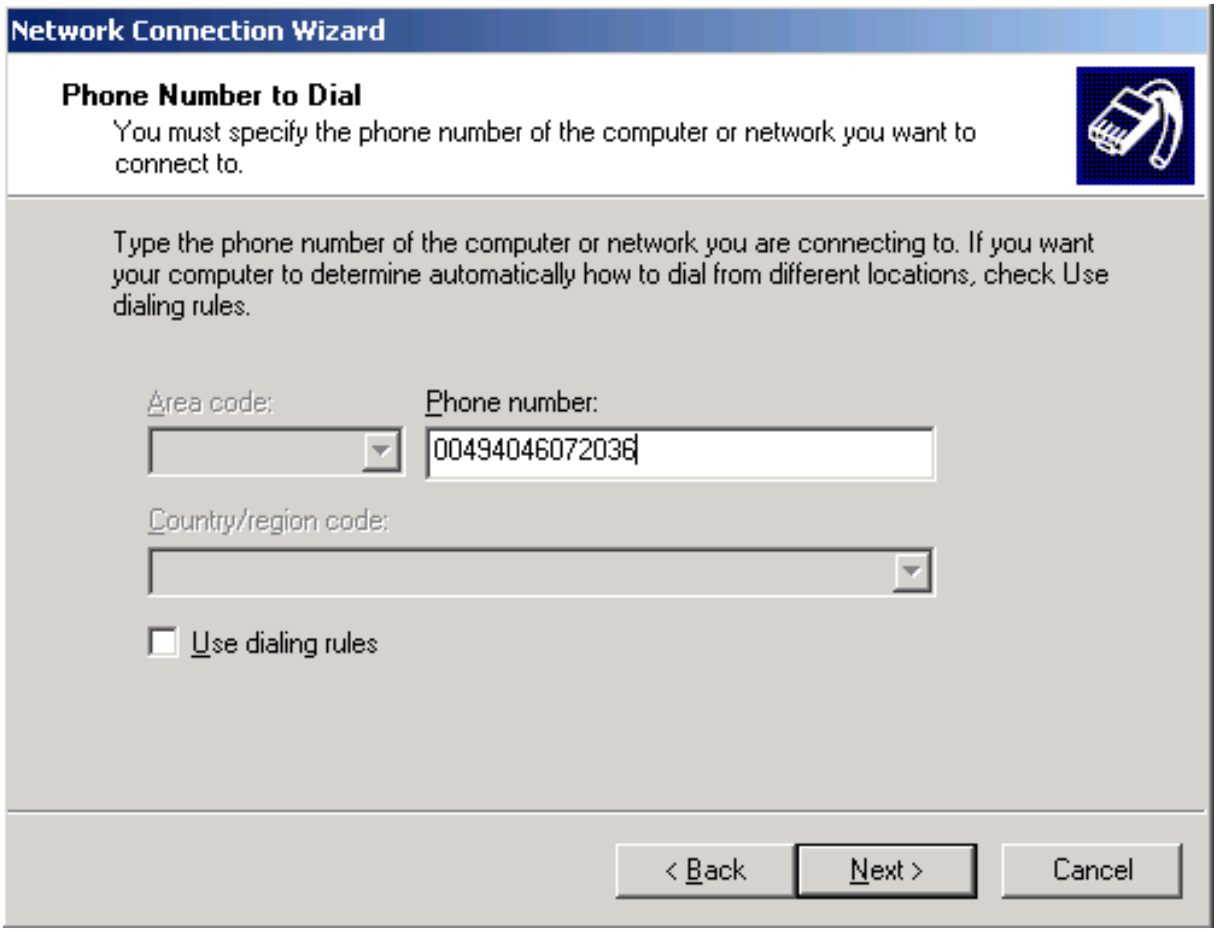


01 - Rasphone.bmp

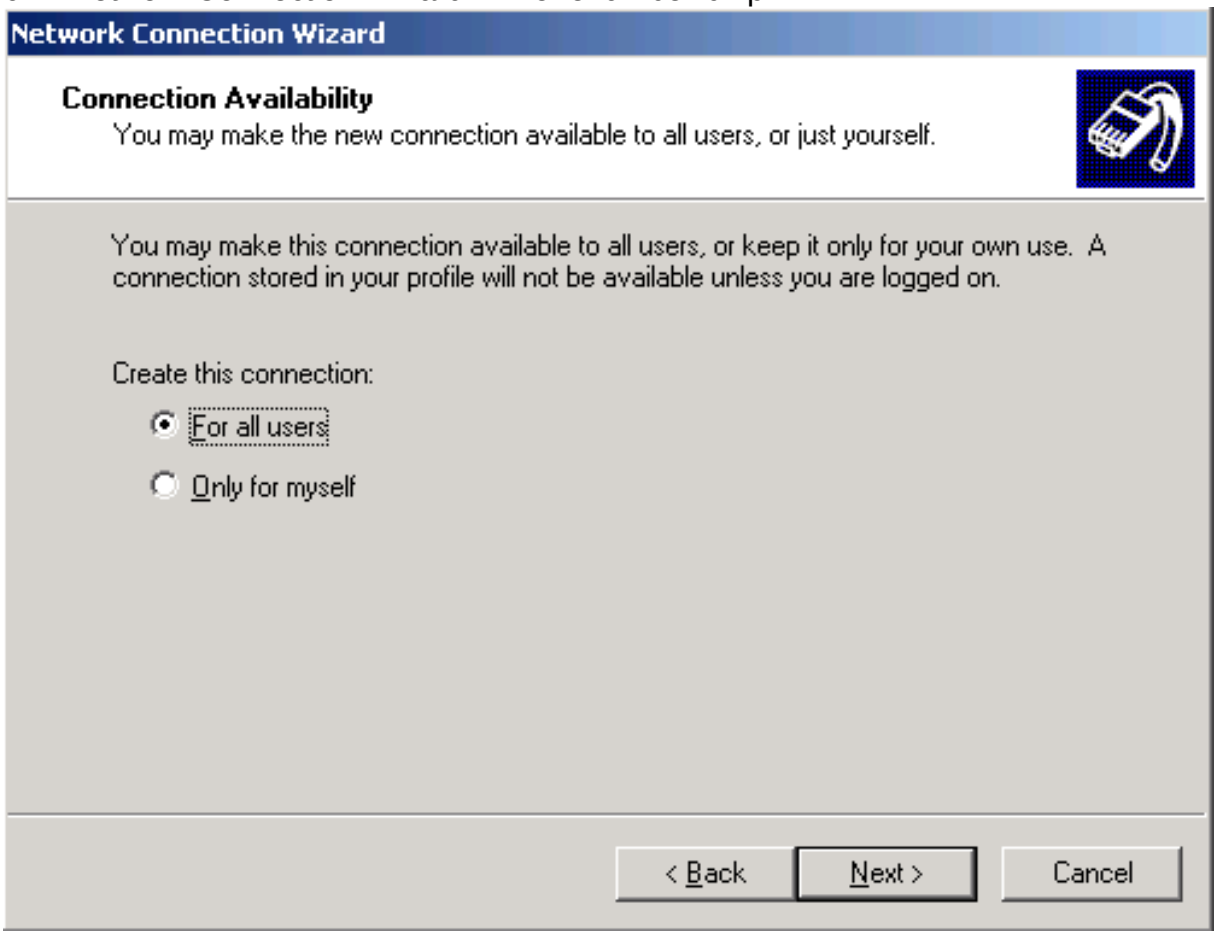

Network Connection Wizard
Type of Connection
Select the type of the connection.
Dial-up to private network.
Connect using my phone line (modem or ISDN).
Connect to a private network through the Internet.
Create a Virtual Private Network (VPN) connection or tunnel through the internet.
Connect directly to another computer.
Connect using my serial, parallel, or infrared port.
< Back
Next >
Cancel

02 - Rasphone Network Connection Wizard - Network Connec Type - Dial Up Private.bmp

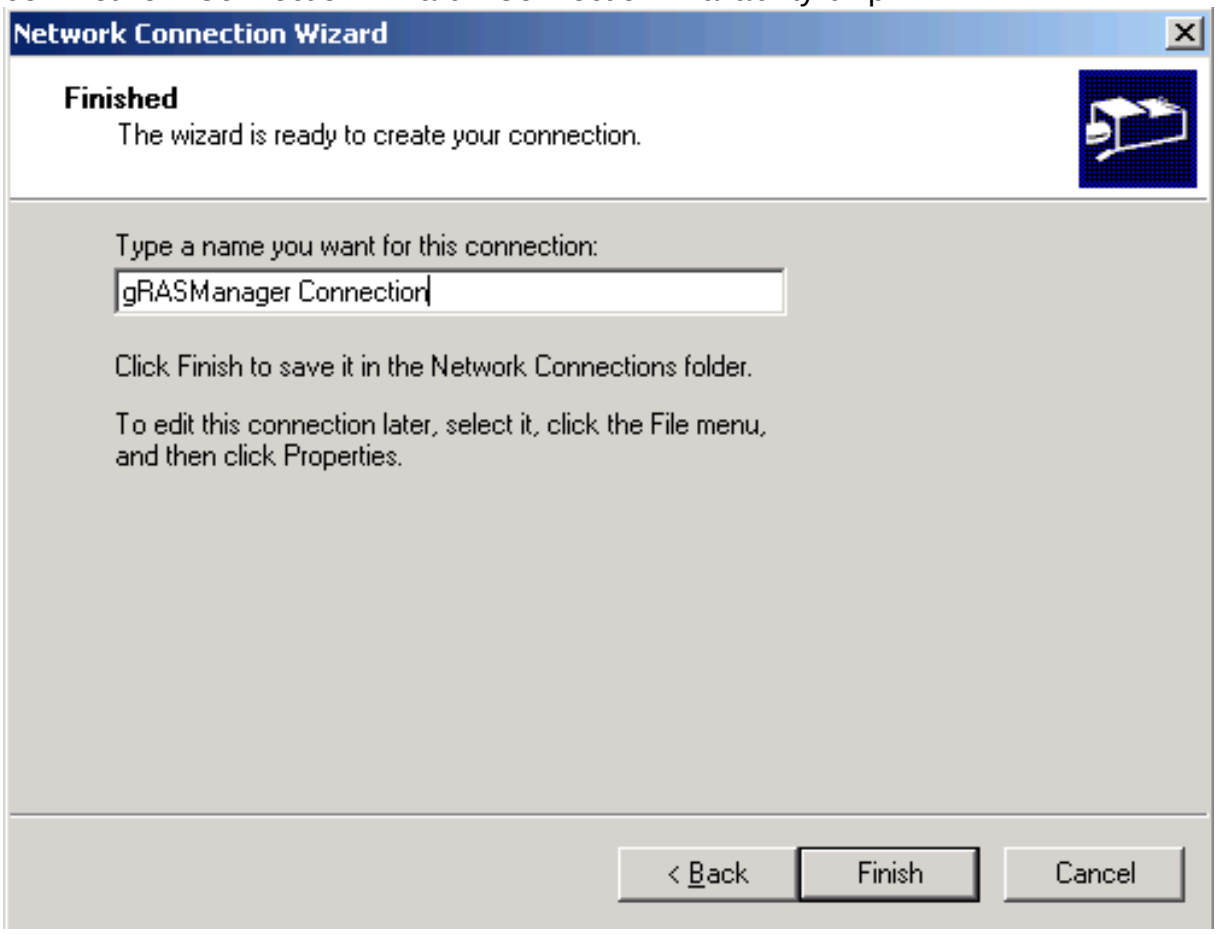
03 - Network Connection Wizard - Select Device.bmp (same as “dial up” picture 3)


Network Connection Wizard
Phone Number to Dial
You must specify the phone number of the computer or network you want to connect to.
Type the phone number of the computer or network you are connecting to. If you want your computer to determine automatically how to dial from different locations, check Use dialing rules.
Area code:
Phone number:
00494046072036
Country/region code:
Use dialing rules
< Back
Next >
Cancel

04 - Network Connection Wizard - Phonenumber.bmp


Network Connection Wizard
Connection Availability
You may make the new connection available to all users, or just yourself.
You may make this connection available to all users, or keep it only for your own use. A connection stored in your profile will not be available unless you are logged on.
Create this connection:
For all users
Only for myself
< Back
Next >
Cancel

05 - Network Connection Wizard - Connection Availability.bmp


Network Connection Wizard
Finished
The wizard is ready to create your connection.
Type a name you want for this connection:
gRASManager Connection
Click Finish to save it in the Network Connections folder.
To edit this connection later, select it, click the File menu, and then click Properties.
< Back
Finish
Cancel

06 - Rasphone Network Connection Wizard - Complete.bmp